

Final report

OWMC

**Ontario
Waste Management
Corporation**

A provincial crown corporation.

**FUTURE
URBAN
RESEARCH**

SITE ASSESSMENT
PHASE 4B:
MUNICIPAL FINANCIAL IMPACT

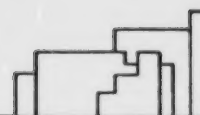
Prepared for
The Ontario Waste Management Corporation

Submitted By

Future Urban Research

October, 1987

**FUTURE
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October 16, 1987

Mr. J. Micak, Project Manager
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Dear Mr. Micak:

I am pleased to submit the report, Site Assessment,
Phase 4B: Municipal Finance Impact providing a detailed
examination of the proposed OWMC waste treatment facility in
West Lincoln.

This report presents a municipal finance review of the
Township of West Lincoln and the Regional Municipality of
Niagara. This study examines the possible financial impacts
that may occur in the candidate municipalities and provides
mitigation and monitoring recommendations.

I appreciate the opportunity to undertake this study and hope
that it assists in clarifying the financial aspects of the
project.

Yours truly,

J.P. Zangari
Future Urban Research

JPZ:ys
Encl.

cc B.J. Sakauye
Environmental Planner

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MUNICIPAL FINANCIAL IMPACT

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EXECUTIVE

SUMMARY

1.0 PURPOSE

The purpose of this report is to examine the possible impacts that Ontario Waste Management Corporation's proposed industrial and hazardous waste management facility in West Lincoln may have on the financial structure of the affected municipalities. This report, therefore, presents an evaluation of the potential cost, revenue and ultimate property tax impacts on both the Township of West Lincoln and the Region of Niagara. Mitigation is also proposed to minimize negative impacts and a monitoring programme is identified to quantify impacts as they actually occur.

2.0 SCOPE

From a municipal finance point of view there are two affected municipalities: the Township of West Lincoln and the Regional Municipality of Niagara. When Niagara Region and its constituent area municipalities were established, areas of jurisdiction were divided in a manner that do not overlap. Therefore, both levels of government potentially can experience direct impacts resulting from the OWMC facility. This report also comments on the school

boards operating within West Lincoln since 55% of the property taxes paid by the rate payers of West Lincoln go towards education.

3.0 DATA USED

The data used to prepare this base description were taken from the financial statements and financial information returns of both the Township and the Region. In addition, supporting documents were drawn upon such as: The Financial and Economic Survey published by the Region of Niagara; cost apportionment schedules provided by the Ministry of Municipal Affairs and the Ministry of Revenue; as well as enrollment and financial statistics from the Lincoln County Public School Board and the Lincoln County Roman Catholic School Board. The base year for analysis purposes is 1984. This report also comments upon the trends occurring in the financial activity of the affected municipalities. To do this, historical summaries were prepared for the five year period from 1980 through 1984.

4.0 PREMISES/POSTULATES

4.1 Property Assessment

For the analysis, exempt property assessment for the OWMC facility is based on design costs related to a 150,000 tonne capacity plant

(Site Assessment, Phase 4B: Facility Characteristics, 1987, Monenco Limited.) To relate the realty construction estimates of the facility to the local assessment base in West Lincoln, the analysis employed the equalization factors that are provided by the Ministry of Revenue, who concurred with the approach.

Business assessment is expected to be 60% of realty assessment.

4.2 Households

Included in the estimates for induced residential assessment growth is a provision for new households in West Lincoln and Niagara Region. The derivation of this estimate and a full description of the induced growth effects is contained in the report Site Assessment, Phase 4B: Economic Impacts, 1987, prepared by Morehouse Economic Planning Consultants.

4.3 Municipal Expenditures and Revenue

Since discussions with municipal officials were held, direct cost estimates have been used wherever possible. In addition to this, it is assumed that operating expenditures vary with the number of households as well as the amount of any induced commercial assessment in the Township. It is also assumed that the current Provincial grant programme will be in place when the OWMC facility

is constructed and operating. Any future changes to the grant formulae should be examined as part of the monitoring programme.

The current level of service offered by the affected municipalities is assumed to remain the same when the effects resulting from the OWMC facility are being experienced. To identify the cost impacts, a bench mark is needed to gauge the changes. This assumption is made to more clearly isolate the effects of the proposed facility.

The analysis is also conducted in real dollar terms rather than inflated dollars in the future. The results of the analysis are therefore expressed in 1984 dollars which represents the base year for the study. Moreover, future changes in the Provincial or National economies are not considered in the analysis.

5.0 METHOD OF ANALYSIS

To undertake the analysis, a computer model was developed which simulates the municipal finance structure of both the Township of West Lincoln and the Region of Niagara. This model includes several impact components: households and property assessment, operating and capital expenditures, non-tax revenues and capital financing sources, the allocation mechanism for apportioning the Region levy, the derivation of the OWMC payments in lieu of taxes and a property tax summary. With the model, financial impacts at

various stages of operation can be determined.

To carry out a thorough review, the consultant met senior staff of the Township and the Region to discuss the financial implications that may result from OWMC's presence. Information obtained in these meetings has been incorporated in the analysis.

6.0 MAIN FINDINGS

6.1 Property Assessment

The establishment of a 150,000 tonne/annum facility will add \$13.6 million in property and business assessment to the Township's 1984 tax base of \$15.7 million. This represents an 84% increase in the property tax base and will bring the Township's total assessment to \$29.3 million. This is shown in chapter 3 of this report.

The establishment of the OWMC facility will also induce a further indirect growth in property assessment of \$326,600 in West Lincoln. This includes additions to the tax base for commercial and business assessment (\$292,500) and additional residential assessment (\$82,100). The farm assessment that the OWMC facility will replace (\$23,000) and decreases in residential assessment resulting from possible property value reductions (\$25,000) are also incorporated in the above figure. In 1984, the commercial sector amounted to 19% of the Township's total tax base. The OWMC assessment and its related growth effects may increase this sector

to 54% of the total.

The establishment of the OWMC facility has a substantially smaller effect on the entire Region of Niagara. The property assessment from all direct and induced growth aspects adds less than 2% to the Region's existing tax base. When expressed in terms of market value, the establishment of the OWMC facility effectively adds \$130.8 million to the Region's 1984 base of \$7.7 billion.

6.2 IMPACT ON NIAGARA REGION

6.2.1 Operating Cost

Annual Regional operating expenditures are forecast to increase by \$147,500 on a 1984 level for total expenses of \$110 million. This includes General Government, Police, Roads, Emergency Measures, Water and Sewer Distribution, Health, Social Services, and Planning and Development. The expenditure estimates for each department are based on a growth component, because of the new residents and businesses moving into the Region, as well as the direct annual service requirements of the OWMC facility.

6.2.2 Capital Cost

In preparation for the OWMC facility, additional up front capital expenditures for the Region are expected to total \$100,000 before

the OWMC facility proceeds. This represents a provision for further planning requirements and a contingency for a possible Region wide health survey. In addition to these capital expenditures, it is expected that up front costs of \$300,000 for professional fees for technical reviews may be incurred, but these will be offset by OWMC.

6.2.3 Revenue

The Region's share of the OWMC Payment in Lieu of Tax (PIL) may exceed \$1.0 million annually. Other induced annual revenue impacts result in a \$44,700 increase in non-tax revenues to the Region. Some revenues increase because of the added households which affect the Provincial unconditional grants and the Region's wholesale water and sewer rates. Other revenues increase because of the extra costs. The Provincial conditional grants are designed to offset expenditures and, therefore, increase as expenditures rise.

6.3 IMPACT ON WEST LINCOLN

6.3.1 Operating Cost

Due to the relatively low number of new households expected, operating expenditures are only forecast to increase by \$116,800 on a 1984 level of expenditures of \$2.3 million. Included in this additional cost is a provision for a staff member to monitor

possible future impacts; other general government involvement in OWMC related matters; extra winter road maintenance to allow for the movement of employee traffic (construction and operations) should they not use Provincial or Regional roads for their home to work trips; and an allotment for possible increased liability insurance premiums. These annual expenditures are also based on a growth component because of the new residents and businesses moving into the Township.

6.3.2 Capital Cost

In preparation for the OWMC facility, additional up front capital expenditures in West Lincoln are expected to total \$200,000 before the OWMC facility proceeds. This includes a provision for emergency response and roads maintenance equipment, added planning and development impacts and a contingency which may incorporate any recreational and cultural (museums and libraries) costs resulting from the new households. Also, up front costs of \$300,000 for technical reviews will be offset by OWMC.

6.3.3 Revenue

The Township's share of the payments in lieu of taxes that will be made annually by OWMC are forecasted to approach \$772,000. These payments are determined similar to property taxes and will be levied on OWMC each year by the Township.

Other induced revenue impacts for the Township result in a \$63,000 reduction to non-tax receipts. Two significant grant reductions relate to the Township's road subsidies from the Ministry of Transportation and Communications and the Resource Equalization Grant paid by the Ministry of Municipal Affairs. These subsidies allow for property assessment growth and the large amount of OWMC related assessment may cause a reduction in the assistance that will be paid to West Lincoln.

6.3.4 West Lincoln's Share of the Regional Levy

To determine the appropriate levy share for each area municipality, Regional costs are divided according to the relative amounts of assessment in each municipality in Niagara. Due to the substantial increase to West Lincoln's property assessment base, the Township's share of the Regional levy increases substantially. The following itemizes this impact.

- a) West Lincoln's share of the Region levy can potentially increase from 2.4%, or \$997,000, to 5.4%, or \$2.3 million. This represents an increase of \$1.3 million or 130%.
- b) The Region's share of OWMC payments in lieu of taxes may total \$1,050,000 only. This leaves a potential difference of about \$245,000 to be paid by the existing

community through their property taxes.

- c) If there were no increases in Regional expenditures the amount paid by all of the other municipalities in Niagara Region would reduce by the amount of the increase in the share paid by West Lincoln, ie. \$1.3 million. Since net Regional expenditures after revenue changes are affected by the OWMC facility the amount gained by the other municipalities is lessened by \$103,000. The amount saved by the other municipalities therefore approaches \$1.2 million.

6.4 BOARDS OF EDUCATION

Both the Lincoln County School Board and the Lincoln County Roman Catholic School Board indicated that the low number of new households forecasted would not cause significantly large added costs to accommodate the increased number of students. The potential pupil enrollment from this small number of families could be absorbed into the current schools, assuming that the distribution of children's ages, and therefore grade levels, was reasonably dispersed. This is particularly true under the worst case out-migration expectations already described.

The proposed OWMC facility will not have an impact on the school boards' cost sharing procedures as does the Regional apportionment system. Similar to Niagara Region, the school

boards distribute their costs on the basis of assessment to determine how much each municipality is levied. Unlike the Region, however, the education cost sharing procedure does not include the assessment associated with government facilities. Education levies on West Lincoln, therefore, will remain at their present levels after the OWMC facility is constructed.

6.5 PROPERTY TAX IMPACT

The establishment of the OWMC industrial waste site in West Lincoln may increase property taxes by 5.6%. This represents a \$24.80 increase on average taxes of \$442.00 now paid to the Township and the Region. This increase would occur in addition to inflation or any other changes in budgetary spending that West Lincoln may consider necessary.

The principal reason for this tax impact is that, the increase in West Lincoln's share of the Regional levy is not offset by the Region's share of OWMC payments in lieu of taxes. Moreover, while the Township's share of OWMC payments in lieu of taxes exceeds cost increases, it is not offset. This is demonstrated on Table A-1. This shows the average annual impact of the facility after aggregating all elements over the 25 to 30 year life of the facility.

Table A-1

TOTAL FINANCIAL IMPACT ON WEST LINCOLN

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Apportionment Increase	\$679,800	\$1,296,900	\$1,976,700
Less: OWMC PIL	(771,800)	(1,050,000)	(1,821,800)
	-----	-----	-----
Net Cost (Benefit)	\$ (92,000)	\$ 246,900	\$ 154,900

6.6 STAGING AND TIMING OF IMPACTS

Throughout operations, the OWMC payments in lieu of taxes may vary between \$1.5 to \$1.8 million per year. Once the initial up front costs have been incurred, the Township may remain with an excess of PIL receipts of \$128,000 after West Lincoln's share of the Regional levy is paid. This can result in an 8.3% decrease in the tax levy on the local rate payers. While this is certainly beneficial, the difficulty rests with the Provincial formula for sharing the PIL between the Township and the Region. In all stages examined, the Regional share of the PIL may not be large enough to fund the increase in the levy on West Lincoln. As a result, paying this cost from the total PIL erodes that share that would normally accrue to the Township. If West Lincoln's share of

the Regional levy were offset, the Township would receive a net benefit of \$363,000 per year instead of \$128,000, after all other OWMC related operating costs are paid. This money would then be available to use for other municipal purposes.

6.7 SENSITIVITY ANALYSIS

The most significant variable in the municipal financial analysis is the valuation of the property assessment associated with the OWMC facility itself. Since this is based on estimates of the cost of land and buildings, the net financial impact was tested using a range from minus 20% of the values used in the base impact scenario to plus 20%. While the base case forecasts the amount of the PIL to total \$1.8 million, this could range from \$1.5 million to \$2.1 million, depending on the final construction cost of the facility. Moreover, the tax increase on the rate payers of West Lincoln could vary from 2.6% to 9.1% as compared to the 5.6% forecasted in the base impact scenario.

All other variables have a very minor effect on the municipal finance analysis. The number of households in either West Lincoln or the Region has virtually no effect on PIL's or the tax impact. Similarly, various levels of operating expenses, induced commercial or industrial assessment or more severe decreases in property values have very little effect on the analysis.

7.0 FINANCIAL MITIGATION

7.1 Payments in Lieu of Taxes

Fundamental to a suggested mitigation approach is the payments in lieu of taxes that the OWMC will remit to West Lincoln. Not all OWMC related costs to the Township or the Region need be compensated separately. Some represent expenses that would normally be paid for out of the municipality's operating revenue. Since the amount of the annual payments in lieu of taxes is substantial certain cost impacts will be automatically defrayed. Only OWMC related capital costs need be funded separately since these are not operational items.

7.2 Apportionment of the Regional Levy

There are two strategies that could be used to overcome the deficit caused by the increase in West Lincoln's share of the Regional levy, but both would require the concurrence of the Ministry of Municipal Affairs and the Township of West Lincoln.

1. Make use of a Regional mill rate, rather than the apportionment procedure. In this case the Ministry of Municipal Affairs may also require a complete reassessment of all property in Niagara Region.

2. Revise the payment in lieu of tax formula so that more money is remitted to West Lincoln.

7.3 OWMC Payments

Given the above suggestions for mitigation, the following summarizes the payments that could potentially be made by OWMC.

OWMC Payments

Mitigation -- Paid Once	
West Lincoln	\$200,000
Niagara region	100,000
	\$300,000
Building Permits	\$600,000
Total Up Front	\$900,000
Payments In Lieu of Tax	
Paid Annually	
West Lincoln	\$ 775,000
Niagara Region	1,050,000
Revised Formula	250,000
Total Annual	\$2,075,000

As already described, once operations commence, the Township may receive a net benefit of \$128,000 per year if the shortfall resulting from West Lincoln's share of the Regional levy is not mitigated. If this deficit balance were offset West Lincoln would receive excess funds of \$363,000 per year. This compensation programme, therefore, could reduce property taxes by almost 20% or make funds available to use for other Township purposes.

8.0 MONITORING

The monitoring programme is intended to identify, isolate and quantify impacts arising from the establishment of the OWMC facility as they actually occur. It is an on-going verification of the impact analyses and also monitoring will measure the effectiveness of mitigation. As impacts are seen to occur, corrective action can be taken if warranted. The monitoring programme is also designed so that the municipal finance computer model can incorporate the monitoring data. In this way, the model can be periodically up-dated so that further impact forecasts can be based on the most current information.

It is intended that monitoring be conducted annually after the municipal financial statements are available (probably by mid to late spring). For the most part, this annual monitoring is a straight forward exercise, however, some items will occasionally require a more detailed analysis. It is suggested that these be conducted at least every four to five years to ensure that all financial activity is adequately reviewed. This is not to say that specific analyses may not be conducted sooner if necessary. Whenever a data item behaves in a manner that was either not anticipated, or wholly explained, a full analysis may be warranted.

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 Payments in Lieu of Taxes

The payments in lieu of taxes will automatically defray operating costs specifically related to OWMC. For West Lincoln, these include: the environmental project co-ordinator during initial stages of the project; other general government involvement in OWMC related matters during operations and monitoring; additional road maintenance to provide for OWMC employee traffic on Township roads; and increased liability insurance premiums. For Niagara Region, these costs include: a possible staff addition to the Health Unit to undertake medical monitoring; additional road maintenance on Region Road #24; and a provision for increased liability insurance premiums.

9.2 Capital Costs Mitigated Separately

Up front capital expenditures resulting from the requirements of the OWMC facility can be mitigated separately. Capital expenditures in West Lincoln are expected to total \$200,000 before the OWMC facility proceeds. This includes \$100,000 for fire and roads maintenance equipment; \$50,000 representing only the new household requirements for recreational and cultural facilities; and \$50,000 for additional planning requirements. Up front capital expenditures resulting from the presence of the OWMC plant

for Niagara Region are expected to total \$100,000. This represents site related planning requirements and a provision for a possible Region wide health survey.

9.3 Apportionment of the Regional Levy

To allow for a large enough Regional share of the PIL to fully fund the impact of apportionment on West Lincoln it is suggested that the method for determining the payment in lieu of tax be revised. This revision would be based on the current derivation of PIL's for West Lincoln's own purposes. In addition to this, the Regional PIL would be determined according to the amount of the upper tier levy that is attributed solely to the OWMC facility.

While two options are presented in the text, this option is being recommended because it is less disruptive to the other municipalities in the Region and it places funds directly with West Lincoln.

9.4 Building Permit Fees

It is suggested that the amount of building permit fees paid by the OWMC not be considered as a compensation item. If West Lincoln obtains the necessary expertise to carry out inspections through an outside agency then the OWMC may consider mitigating this cost. If the OWMC arranges the inspections and protects West

Lincoln's liability with respect to building codes, there may not be any cost to the Township to mitigate. Under West Lincoln's current bylaw, the building permit fee could approach \$600,000, which in the latter example, would represent a wind fall to the Township.

9.5 Monitoring

It is also recommended that a monitoring programme be established. This programme will assist in identifying and quantifying any demonstrable financial impacts on West Lincoln and Niagara Region as they occur. In this way, the effectiveness of the mitigation measures can be addressed and the appropriate action taken. The monitoring programme should be conducted in co-operation with the Township and the Region. Monitoring should be conducted annually and begin with the construction of the facility. Periodically, the monitoring programme should also include discussions with municipal officials, provincial ministries and school boards. A complete list of the data to be monitored, level of detail and frequency is presented in the text of this report.



CHAPTER 1
INTRODUCTION, METHOD
AND ASSUMPTIONS

1.1 PURPOSE OF THE REPORT

This report documents the Site Assessment, Phase 4B: Municipal Finance Impact, 1987, carried out as part of the Ontario Waste Management Corporation's Facilities Development Process. Phase 4B involves detailed assessments of the preferred site and surrounding area based on several disciplines, including Municipal Finance.

The specific objectives of Phase 4B are to:

1. Define the existing environmental conditions of the preferred siting option.
2. Predict and assess potential risks and impacts that may be associated with the proposed facility design, operations and

decommissioning.

3. Identify and develop appropriate mitigative measures to minimize the potential risks and impacts associated with the proposed facility design, operations and decommissioning.
4. Interpret the residual impacts after mitigation.
5. Identify and develop monitoring programmes that will be implemented to assess the effectiveness of the design, operations in minimizing risks and impacts.
6. Prepare documentation to meet the requirements of Ontario's Environmental Assessment Act.

This study presents an evaluation of the potential cost, revenue and property tax impacts on both the Township of West Lincoln and the Regional Municipality of Niagara. Accordingly, this report:

Documents the existing state of financial conditions in the two municipalities before the construction of the OWMC facility begins, and

Documents the impacts that Municipal Finance may have on the area associated with development, operation and closure of the proposed facility, together with recommended mitigative

measures and a monitoring programme. Figure 1-1 show the Facilities Development Process and Figure 1-2 locates the preferred site.

1.2 METHOD

1.2.1 STUDY AREA

From a municipal finance point of view there are two municipalities that may be impacted upon, the Township of West Lincoln and the Regional Municipality of Niagara. When Niagara Region and West Lincoln were established areas of jurisdiction were divided in a manner that do not overlap. For example, local roads are the responsibility of the Township, while major arterial routes fall under the jurisdiction of the Region. Therefore, both levels of government potentially can experience impacts resulting from the OWMC facility. Moreover, because of the cost sharing relationship between the two municipalities, financial impacts on West Lincoln can also be caused indirectly. It is the purpose of the municipal financial component of the analysis to capture any impacts in this area as well.

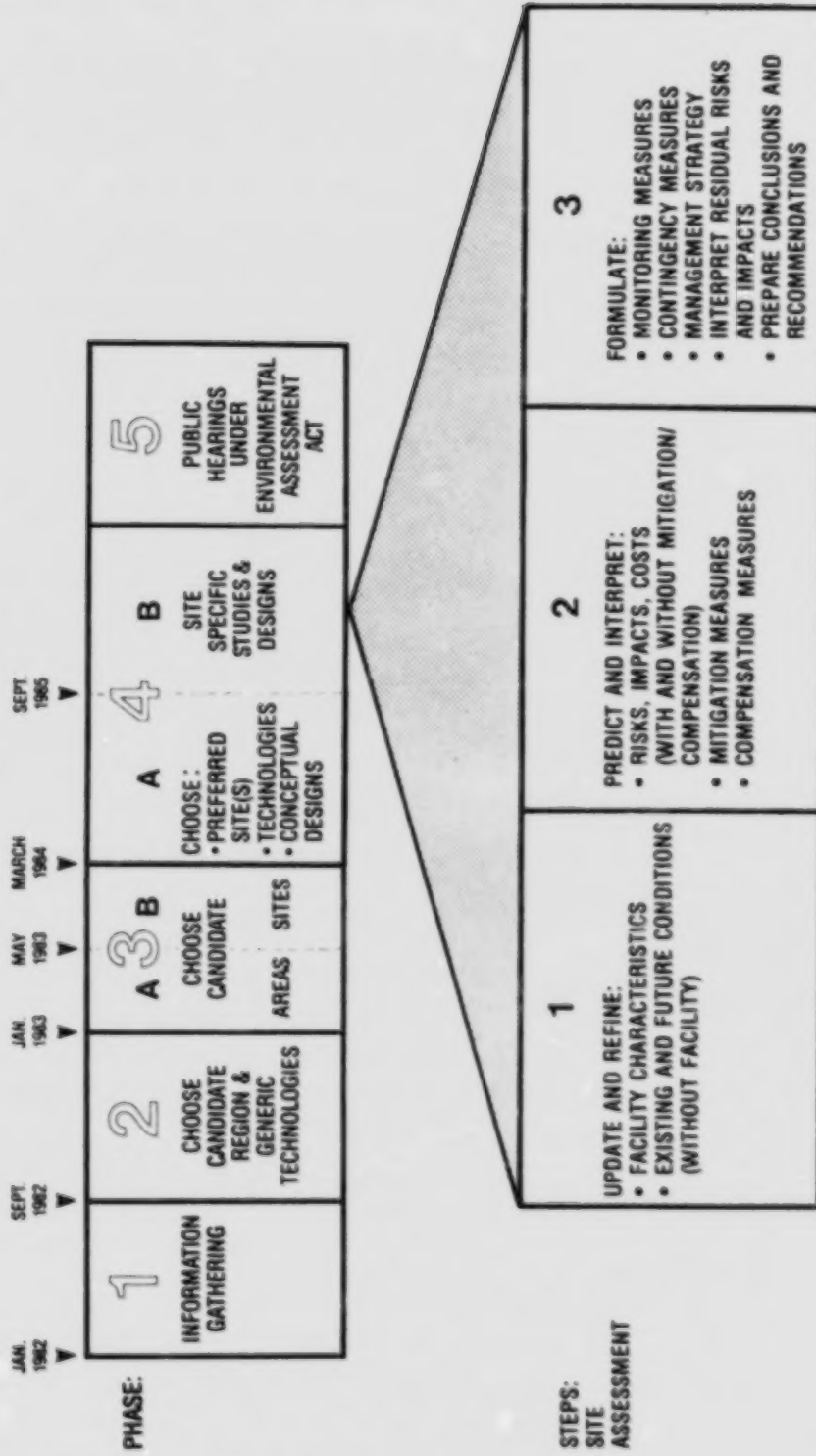


FIGURE 1-1
Facilities Development Process

Township of West Lincoln, Regional Municipality of Niagara. Local Detail.



In addition to the impact on the affected municipalities, this report also comments on the school boards operating within West Lincoln. This is also included for two reasons:

First, 55% of the property taxes paid by the rate payers of West Lincoln are for education purposes. While the OWMC facility may not have a direct impact on the school boards' cost sharing, there may be indirect effects through higher enrollments via increased population either because of construction and operation of the facility or by induced growth effects. Impacts of this nature may increase tax requirements depending on the level of Provincial support provided to the school boards.

Second, similar to the municipalities involved, the establishment of a base description of the school boards financial profile will assist in a future monitoring programme.

1.2.2 DATA USED IN THE ANALYSIS

The data used to prepare this base description were taken from the 1984 financial statements and financial information returns of both the Township and the Region. In addition, supporting documents were drawn upon such as:

- The 1984 Financial and Economic Survey published by the Region of Niagara,
- Cost apportionment schedules provided by the Ministry of

Municipal Affairs and the Ministry of Revenue,

- Enrollment and financial statistics from the Lincoln County Public School Board and the Lincoln County Roman Catholic School Board.

For analysis purposes, 1984 represents the base year for all impact comparisons. Chapter 2 of this report also comments upon trends occurring in the financial activity for the municipalities. To do this, historical summaries were prepared for the five year period from 1980 through 1984.

1.2.3 MUNICIPAL COMPARISON

To give the municipal financial review a frame of reference, the report also compares some basic financial statistics for West Lincoln to those of its neighbouring municipalities within the Region of Niagara. So that the Township is not contrasted with the highly urbanized centers of St. Catharines or Niagara Falls, the selected municipalities were limited to those with a population of less than 20,000. No further selection criteria were used so as not to bias the comparison. A similar comparison was not undertaken for the Region because the government structure of upper tier levels differ more widely than lower levels. Consequently a realignment of these structures can bias analyses. Moreover, since Niagara Region levies on its member municipalities, the ultimate tax burden is embodied in the tax

summary for West Lincoln.

1.2.4 THE IMPACT ANALYSIS

To undertake the impact analysis, a computer model was developed which simulates the municipal finance structure of both the Township of West Lincoln and the Region of Niagara. This model includes several impact components:

- households and property assessment,
- operating and capital expenditures,
- non-tax revenues and capital financing sources,
- the allocation mechanism for apportioning the Region levy,
- the derivation of possible OWMC payments in lieu of taxes and
- a summary property tax impact forecast.

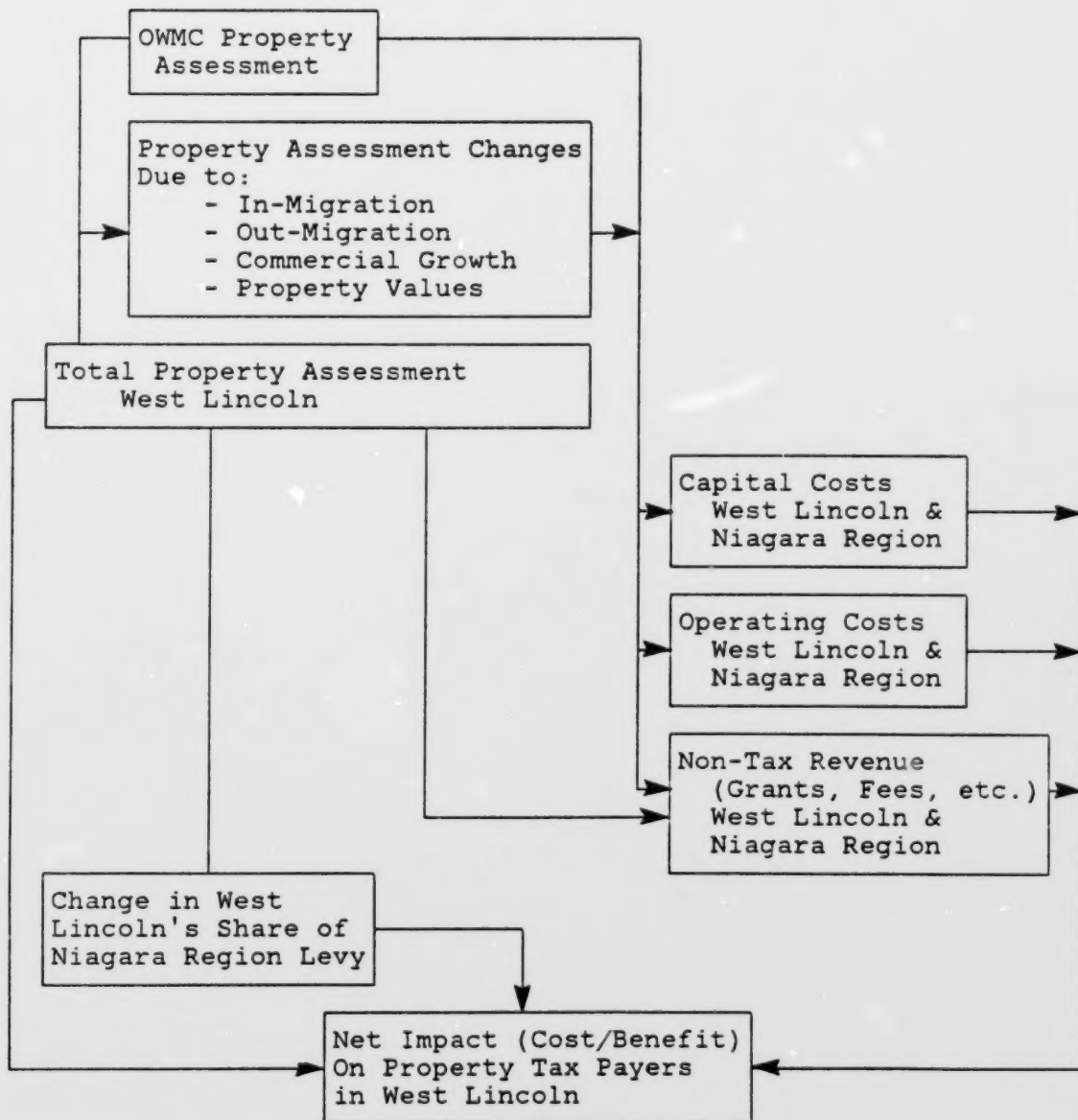
With the model, financial impacts at various stages of operation can be determined.

1.2.5 INTERVIEWS

To carry out a thorough review, the consultant also met senior staff of the Region and the Township to discuss the financial implications that may result from OWMC's presence. The information obtained during these discussions has been incorporated in the analysis.

FIGURE 1-3

Major Components of the Analysis



1.3 ASSUMPTIONS

1.3.1 PROPERTY ASSESSMENT

For the purposes of the analysis, the derivation of exempt property assessment for the OWMC facility is based on design costs related to a 150,000 tonne/annum capacity plant. Excerpts from the report Site Assessment, Phase 4B: Facility Characterisitcs, 1987, Monenco Limited are shown in Appendix B. To relate the realty construction estimates of the facility to the local property assessment base in West Lincoln, which is based on 1940 construction valuations, the analysis employed the equalization factors that are provided by the Ministry of Revenue, who concurred with the approach as a first approximation.

Business assessment is expected to be 60% of realty assessment. This is the level accorded the Tricil facility in Sarnia. While definitions in the Assessment Act may be subject to multiple interpretation, the Ministry of Revenue has confirmed the categorization of the OWMC facility as industrial/manufacturing at the 60% level. Other induced business growth is expected to be taxed at the 30% commercial rate.

1.3.2 HOUSEHOLDS

Included in the estimates for induced residential assessment growth is a provision for new households in West Lincoln and

Niagara Region. The derivation of this estimate and a full description of the induced growth effects, including the commercial and industrial sectors, is contained in the report Site Assessment Phase 4B: Economic Impacts, 1987, prepared by Morehouse Economic Planning Consultants. The municipal finance analysis only is concerned with new households moving into the municipalities and not with the total number of local residents, now living in the Township, who may work at the OWMC facility. This latter group already pays property taxes and demands and makes use of the services now provided by the Township.

1.3.3 MUNICIPAL EXPENDITURES AND REVENUE

Since discussions with municipal officials were held, direct cost estimates have been used wherever possible. In addition to this, it is assumed that operating expenditures vary directly with the number of households as well as the amount of any induced commercial or industrial assessment in the Township.

The Province represents a substantial funding source for the municipalities and the grant structure that existed in 1984 is used for forecasting purposes. Implicitly it is assumed that the current Provincial grant programme will be in the same form when the OWMC facility is constructed and operating. This assumption is unrealistic in that some grants may probably change during the life of the OWMC facility. It is impossible to determine how or

when the Province may change its grants over such a long time horizon and any anticipation would probably be wrong. Any future changes to grant formulae, therefore, should be examined separately as part of the monitoring programme.

It is also assumed that the current level of service offered by the affected municipalities will remain the same when the effects resulting from the OWMC facility are being experienced. To identify the cost impacts that are the result of the OWMC facility a bench mark is needed to gauge the changes. The quality, or level of service offered by the municipalities can change independently of other events because it is the result of policy decisions. This assumption is made to more clearly isolate the effects of the proposed facility. This is not to say that tastes and expectations will change as new OWMC related residents move into the area. This latter type of change, however, has been taken into consideration.

The impact analysis is carried out in the absence of OWMC mitigation to obtain a complete statement of financial effects. Mitigation is discussed and quantified separately. The analysis is also conducted in real dollar terms rather than inflated dollars in the future. The results of the analysis are therefore expressed in 1984 dollars since that is the base year for the study. Moreover, any changes in the Provincial or National

TABLE 1-1

Rationale for Assumptions Employed

Assumption	Rationale for Assumption
o approximately 20 new households will be generated in the Township of West Lincoln	o derived from Phase 4B Economic Impact Assessment
o approximately 55 new households will be generated in the Region of Niagara	o as above
o new induced commercial growth is assumed to be charged business tax at a rate of 30% of its property value	o induced commercial growth expected to be in the small retail and service sectors o 30% is the business tax rate stipulated in the Assessment Act
o the OWMC facility is assumed to be charged business tax at a rate of 60% of its property value	o this is the level that the Ministry of Revenue determined to be appropriate for the Tricil facility in Sarnia
o provincial grant program will be in the same form when the OWMC facility is constructed and operating	o this assumption is unrealistic in that Provincial grant formulas may change by the time the facility is constructed and/or operating; it is impossible, however, to determine how or when the Province may change its grants
o the current level of services offered in the community will remain the same with the establishment of the OWMC facility	o this assumption is made to isolate the effects of the proposed facility on community services
o the municipal finance analysis employs real dollars rather than inflated dollars in the future; any changes in the provincial or national economies are not considered in the analysis	o the inclusion of an inflation rate can be misleading by giving the appearance of excessively large figures

economies are not considered. Since these cause changes to financial items such as debenture interest rates, they can be examined separately through the monitoring programme. The foregoing assumptions are summarized on Table 1-1.

1.3.4 SENSITIVITY ANALYSIS

The purpose of the sensitivity analysis is to test the reliability of the conclusions. By evaluating the most likely ranges for the underlying variables, different levels for the net property tax impact can be obtained. By comparing these results, the analysis can determine the significance of the variables as well as the overall range of the possible impact values. The sensitivity tests were conducted using the municipal finance computer model developed for the impact analysis.

1.3.5 STAGING AND TIMING OF IMPACTS

The analysis presents a view of the overall financial impact that the establishment of the OWMC facility can potentially have on the municipalities involved and their constituent rate payers. The municipal finance evaluation also uses four distinct impact stages.

- Impacts occurring prior to the construction of the OWMC facility.

- Impacts occurring during construction
- Impacts occurring with operations at a 150,000 tonne capacity
- Impacts occurring with operations at a 300,000 tonne capacity

The phasing of the project, the staging of expenditures and the timing of the financial mechanisms involved provide a clearer picture of how the municipalities may be impacted upon. Moreover, chapter 5 presents a summary of possible impacts when the OWMC facility is closed and decommissioned.

CHAPTER 2
BASE MUNICIPAL
FINANCIAL PROFILE

2.1 FINANCIAL REVIEW OF THE TOWNSHIP OF WEST LINCOLN

This chapter of the report outlines the financial profile of the Township of West Lincoln. It includes, where possible, a five year review as well as a detailed summary for 1984 for,

- assessment and tax rates
- operating revenue and expenditures
- capital expenditures and reserve fund balances.

2.1.1 POPULATION AND ASSESSMENT

Population activity, the number of households and property assessment levels in a municipality provide indications of the level of municipal services demanded by the community. This is a key element in a municipal financial review since:

- operating expenditures measure the amount of services provided
- provincial grants are determined using the demographic base
- assessment levels represent the municipality's ability to finance the costs of providing public goods and services.

As a result, a brief description of the past demographic and economic activity of West Lincoln is provided here to place the actual financial review of the Township in the context of its overall growth patterns.

Table 2-1 shows the levels of population and households in West Lincoln for the period beginning in 1980 and ending in 1984. Over this time frame the number of persons in the Township increased from 9,827 to 9,892, yielding a growth rate of only 0.7% for the five years. On the other hand, the number of households increased from 2,886 in 1980 to 2,994 in 1984. This represents a total increase for the five year period of 3.7%.

Table 2-1

TOWNSHIP OF WEST LINCOLN
POPULATION AND HOUSEHOLDS
1980 - 1984

	Population		Households		Persons Per Household
	#	% Increase	#	% Increase	
1980	9,827	-	2,886	-	3.4
1981	9,865	0.4%	2,926	1.4%	3.4
1982	9,836	-0.3%	2,939	1.1%	3.3
1983	9,865	0.3%	2,971	0.4%	3.3
1984	9,892	0.3%	2,994	0.8%	3.3
1980-1984	-	0.6%	-	3.7%	-

Source: Township of West Lincoln Financial Statements

This higher growth in households results from a movement to slightly smaller household sizes -- 3.4 persons per household in 1980 to 3.3 persons per household in 1984.

Table 2-2 summarizes the amounts of property assessment in West Lincoln for the same 1980 to 1984 period. During this time, assessment increased by 10.7% from \$16.2 million in 1980 to \$17.9 million in 1984. In this latter year, residential and farm property assessment amounted to 14.5 million, or 81% of total, with the remaining \$3.4 million, or 19%, representing the commercial-industrial sector (including business assessment). While the business sector is a substantially smaller component of the tax base, it has been growing much more rapidly than the residential and farm sector. From 1980 to 1984 residential and farm assessment experienced a total growth of 9.4%. Commercial, industrial and business assessment, on the other hand, grew by 17.2% during the same period. As a result, this latter sector has increased from being 17.8% of total property assessment to its present 18.8%. Within this sector, business assessment has grown the most rapidly (29.1%) and this would most probably represented the establishment of businesses in higher assessment rate categories.

TOWNSHIP OF WEST LINCOLN

Table 2-2

PROPERTY ASSESSMENT
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984		Total
	\$	%	\$	%	\$	%	\$	%	\$	%	% Inc
Residential & Farm	13,294	82.2%	13,627	81.8%	13,995	81.3%	14,304	81.1%	14,549	81.2%	9.4%
Commercial & Industrial	2,160	13.3%	2,248	13.5%	2,319	13.5%	2,397	13.6%	2,432	13.6%	12.6%
Business	726	4.5%	776	4.7%	898	5.2%	929	5.3%	937	5.2%	29.1%
	16,180	100.0%	16,651	100.0%	17,212	100.0%	17,630	100.0%	17,918	100.0%	10.7%
Provincial Equali- zation Factor	7.98		7.76		7.38		7.44		7.36		
Estimated Market Value	202,757		214,575		233,225		236,962		243,451		20.1%
Percent Increase	-		5.8%		8.7%		1.6%		2.7%		
Residential Assess- ment Per Household	5,419		5,479		5,564		5,664		5,717		

Note: Figures represent gross assessment before reduction of 15% for residential/farm property for taxation purposes.

Source: Township of West Lincoln Financial Statements

When applying the Province's equalization factors, the total value of taxable property in West Lincoln can be calculated to exceed \$244 million. (Equalization factors are provided by the Ministry of Revenue and are calculated by relating historical sales to property assessment values.) On average, residential property assessment amounted to \$5,700 per household or \$80,000 when expressed on a market value basis. This amount includes farm property and therefore should not be viewed as an average market value of a housing unit in West Lincoln.

2.1.2 TAX RATES

Table 2-3 presents a summary of residential and farm mill rates for the years 1980 through 1984 inclusive for Township, Regional and public school board purposes. For clarity in presentation mill rates are expressed in terms of tax amounts required for each one-thousand dollars of property assessment.

Table 2-3

TOWNSHIP OF WEST LINCOLN
RESIDENTIAL AND FARM MILL RATES
1980-1984

	1980		1981		1982		1983		1984		Total
	\$	%	\$	%	\$	%	\$	%	\$	%	% Inc
Taxation Rates (Note A)											
Township	38.25	21.2%	39.12	20.8%	51.79	24.5%	51.79	23.1%	53.94	22.7%	
Region	33.83	18.8%	37.83	20.2%	45.77	21.6%	49.20	22.0%	52.97	22.3%	
Schools	108.00	60.0%	110.78	59.0%	113.94	53.9%	122.89	54.9%	130.35	54.9%	
Total	180.08	100.0%	187.73	100.0%	211.50	100.0%	223.88	100.0%	237.26	100.0%	
Annual Percent Increase											
Township	-		2.3%		32.4%		0.0%		4.2%		41.0%
Region	-		11.8%		21.0%		7.5%		7.7%		56.6%
Schools	-		2.6%		2.9%		7.9%		6.1%		20.7%
Total	-		4.2%		12.7%		5.9%		6.0%		31.8%

Note A) Property taxes per thousands of dollars of assessment.

Sources: Township of West Lincoln Financial Statements

In 1984, the total tax rate in West Lincoln amounted to \$237.26 per one-thousand dollars of assessment. Of this, West Lincoln required \$53.94, or 22.7%. The Region of Niagara required a similar amount -- \$52.97, or 22.3% of total -- and the public school board required \$130.35, or 54.9% of total. Over the 1980 to 1984 period, tax rates for all three jurisdictions have increased by 32%. The Township of West Lincoln has experienced a total tax rate increase of 41.0% over this five year period, while the Region's tax rate rose by 56.6% and the Lincoln County School

Board component rose by 20.7%.

2.1.3 OPERATING REVENUE

Operating revenues in West Lincoln are principally derived from three main sources: property taxation, Provincial grants or subsidies and municipal programme revenue. Property taxation has been discussed above and will not be further elaborated upon here. Programme revenue includes user fees, permits and licenses, service charges and interest earnings and other private or public contributions.

In 1984, operating revenue in West Lincoln totalled \$2,913,000. Of this, \$1,072,000, or 36.8%, came from property taxation, while \$1,311,000, or 45.0%, represented Provincial grants and subsidies. Only 17.4%, or \$506,000, was derived from programme or other revenue sources. Although 1984 Provincial grant levels are quite substantial, they have been reducing since 1981 and 1982 when levels of 49% and 52% respectively were recorded. This reflects the Province's trend to reduce grant reliance and the Township's lower road requirements. In 1984, the Township of West Lincoln received \$315,200 in unconditional grants and nearly three times that amount, or \$907,400 in conditional grants. For the unconditional grants, the density, resource equalization and general support grants totalled \$127,400, while the revenue guarantee grant alone totalled \$177,900.

Table 2-4

TOWNSHIP OF WEST LINCOLN

OPERATING REVENUE
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984		Total
	\$	%	\$	%	\$	%	\$	%	\$	%	% Inc
Revenue											
Taxation	731	34.3%	798	32.6%	984	33.9%	1,015	36.9%	1,072	36.8%	
Payments in Lieu	16	0.8%	17	0.7%	21	0.7%	22	0.8%	24	0.8%	
Grants	776	36.4%	1,201	49.1%	1,516	52.2%	1,277	46.4%	1,311	45.0%	
Reserves & Funds	129	6.1%		0.0%		0.0%		0.0%		0.0%	
Other	480	22.5%	431	17.6%	382	13.2%	436	15.9%	506	17.4%	
Total	2,132	100.0%	2,447	100.0%	2,903	100.0%	2,750	100.0%	2,913	100.0%	
Annual Percent Increase											
Taxation	-		9.2%		23.3%		3.2%		5.6%		46.6%
Payments in Lieu	-		6.3%		23.5%		4.8%		9.1%		50.0%
Grants	-		54.8%		26.2%		-15.8%		2.7%		68.9%
Reserves & Funds	-		-100.0%		0.0%		0.0%		0.0%		-100.0%
Other	-		-10.2%		-11.4%		14.1%		16.1%		5.4%
Total	-		14.8%		18.6%		-5.3%		5.9%		36.6%

Source: Township of West Lincoln Financial Statements

TOWNSHIP OF WEST LINCOLN

Table 2-5

OPERATING REVENUES
1984

Taxation		
Own Purposes	1,072,468	16.7%
Region	1,072,903	16.7%
School Boards	2,482,532	38.7%
Water & Sewer Billings	61,906	1.0%
SUBTOTAL	4,689,709	73.1%
Payments in Lieu of Tax	23,752	0.4%
Unconditional Grants		
-Per Household Density	41,594	
-Special Assistance	10,000	
-Resource Equalization	8,233	
-General Support	77,547	
-Revenue Guarantee	177,862	
SUBTOTAL	315,236	4.9%
Conditional Grants		
-Transportation	861,203	
-Recreation	42,115	
-Other	4,070	
SUBTOTAL	907,388	14.1%
Other Revenue	198,454	3.1%
Fees, Service Charges	284,637	4.4%
SUBTOTAL	483,091	7.5%
TOTAL REVENUE	6,419,176	100.0%

Source: Township of West Lincoln
Financial Statements

The conditional grants received by the Township almost exclusively relate to its road programme. Out of the \$907,000 in conditional grants, \$861,200 represent road subsidies from the Ministry of Transportation and Communications. At present West Lincoln's road subsidies are paid by the M.T.C. at the rate of 53% of approved road expenditures. The remaining conditional grants were mainly related to recreational uses (\$42,100).

Tables 2-4 and 2-5 detail the information presented above. Table 2-4 summarizes the major revenue sources for the Township for the years 1980 through 1984 and Table 2-5 provides a detailed breakdown of revenues for 1984.

2.1.4 OPERATING EXPENDITURES

In 1984, the Township of West Lincoln incurred expenditures totalling \$2,880,700 to provide services to its rate payers. Of this, a full 53% or \$1,534,900, related to transportation services dealing with road improvements and maintenance. After this, General Government expenditures totalled 17.3%, or \$499,100. Environment expenditures, including waterworks distribution in Smithville and sanitation comprised 9.8%, or \$282,507. Similarly, recreational services related mainly to the community centre amounted to 9.6% of total, or \$275,900.

Table 2-5
TOWNSHIP OF WEST LINCOLN

OPERATING EXPENDITURES
1984

			Per \$
General Government	499,096	17.3%	167
Protection to Persons and Property	172,037	6.0%	57
Transportation Services	1,534,870	53.3%	513
Environmental Services	282,507	9.8%	94
Health Services	13,305	0.5%	4
Recreation and Cultural Services	275,866	9.6%	92
Planning and Development	103,014	3.6%	35
TOTAL	2,880,495	100.0%	982

Source: Township of West Lincoln
Financial Statements

Expressed on a per household basis, the Township of West Lincoln incurred operating expenditures in 1984 that total \$982.00. This breaks down to \$513.00 per household for transportation; \$167.00 per household for general government; and \$94.00 and \$92.00 per household respectively for Environment and Recreation Services.

TOWNSHIP OF WEST LINCOLN
Detailed Operating Expenditures
1984

Table 2-7

	WAGES AND SALARIES	MATERIALS	DEBT CHARGES	TRANSFERS	TOTAL
General Government	\$193,779	\$91,413	-	\$213,904	\$499,096
Protection to Persons and Property	\$40,392	\$24,794	-	\$56,848	\$172,037
Transportation Services	\$400,339	\$1,035,397	-	\$99,134	\$1,534,870
Environmental Services	\$72,662	\$174,530	\$17,762	\$14,530	\$282,507
Health Services	-	\$7,870	-	\$2,433	\$12,303
Recreation and Cultural Services	\$71,051	\$121,928	-	\$82,987	\$275,966
Planning and Development	\$15,610	\$15,766	\$49,438	\$1,200	\$103,014
TOTAL	\$816,839	\$1,502,698	\$87,200	\$473,953	\$2,880,590

Note: General government expenses include Council, Administration, Clerk's Office and Finance Department.

Source: Township of West Lincoln
Financial Statements

Tables 2-6 and 2-7 provide further details to the information presented above. Table 2-6 outlines each function expenditure on an absolute and a per household basis and Table 2-7 presents the variable and fixed components of each department expenditure.

2.1.5 CAPITAL EXPENDITURES AND FINANCING

The Township of West Lincoln does not make use of extensive debt financing to carry out its capital programme. Instead, the Township makes a greater use of internal funds, the tax base and outside contributions.

For the five years from 1980 to 1984 West Lincoln's average level of capital expenditures amounted to \$460,000 per year. These projects have ranged from a low of \$200,000 in 1980 to highs of \$729,000 and \$714,000 in 1981 and 1982 respectively. These higher expenditures represented extensive road reconstructions which, similar to operating expenditures, made up a major portion of the Township's capital programme. In 1984 the Township undertook \$390,274 in capital expenditures. Costs for road related projects came to 70.0% of this, or \$273,568.

To offset these costs the Township relied most extensively on reserve funds, mainly built up from tax levies. In 1984, contributions from the Township's own funds amounted to 70.6%, or \$271,800, of the total sources of capital financing. Provincial MTC subsidies for road construction contributed only 22.8%, or \$88,000, towards the above-mentioned road construction work of \$273,568.

Table 2-9

TOWNSHIP OF WEST LINCOLN

CAPITAL EXPENDITURES
1984

EXPENDITURES

General Government	19,746	5.1%
Protection	20,892	5.4%
Transportation	273,568	70.1%
Environment	20,100	5.2%
Recreation	25,491	6.5%
Planning & Development	30,477	7.8%
	-----	-----
TOTAL	390,274	100.0%

FINANCING

Revenue Fund (Tax)	52,506	13.6%
Reserves	219,291	57.0%
Provincial Subsidies	88,000	22.9%
Long Term Liabilities	25,000	6.5%
	-----	-----
TOTAL	384,797	100.0%

Unfinanced Capital Outlay 5,477

Source: Township of West Lincoln Financial Statements

The total debt of the Township as of December 31, 1984, was \$386,962 of which \$309,570 represented Tile Drainage assistance loans to farmers. The only other main debt item being carried by the Township amounted to \$70,250 for the sanitary sewerage system.

Table 2-8 summarizes capital expenditures and financing in West Lincoln for 1984.

2.1.6 RESERVE FUNDS

The Township of West Lincoln is in a relatively comfortable position with regards to its reserves and reserve funds. Carrying a total balance of \$825,088 in 1984, this amount represented close to 30% of total operating expenses. While it is sometimes argued that a municipality should have about 50% of operating costs in reserves, this usually depends on the nature and timing of receipts as well as the exposure to large and unforeseen expenses. This may not be the case for West Lincoln since \$383,200 can be easily accessed, representing working funds and contingencies that do not have a specific purpose or claim against them. As shown above, this gives West Lincoln the ability to avoid debt costs by using these funds to finance capital costs. Table 2-9 summarizes the reserves and reserve funds for the Township in 1984.

TOWNSHIP OF WEST LINCOLN

Table 2-9

Reserves and Reserve Fund Balances
1984

Working Funds	172,231
Contingencies	209,932
Ministry of the Environment Fund for Renewals, etc.	
-- sewer	48,346
Replacement of Equipment	86,978
Sick Leave	69,019
Insurance	3,526
Capital Expenditure	
-- general administration	31,290
-- library and other recreation	3,970
-- industrial development	93,983
Lot Levies and Subdivider Contributions	19,142
Recreational Land (The Planning Act)	14,501
Library Current Purposes	
-- Ward 2 Fund	51,518
-- Drainage	3,000
-- Caistor Centre Recreation Fund	152
-- Election Expense	10,000
-- Commercial & Industrial Development	2,500
TOTAL	825,088

2.2 MUNICIPAL FINANCIAL COMPARISON

To give the municipal financial review of the previous chapter a frame of reference, this section of the report compares some basic financial statistics for West Lincoln to those of its neighbouring municipalities within the Region of Niagara. So that the Township is not contrasted with the highly urbanized centers of St. Catharines or Niagara Falls, the selected municipalities was limited to those with a population of less than 20,000. No further selection criteria was used so as not to bias the comparison.

The municipalities in the Region of Niagara with population less than 20,000 are shown on Table 2-10. Also shown, is the

Table 2-10

MUNICIPALITIES WITH POPULATION LESS THAN 20,000

	<u>Population</u>	<u>Households</u>	<u>Persons Per Household</u>
West Lincoln	9,836	2,971	3.3
Mainfleet	5,883	2,682	2.2
Thorold	16,086	5,631	2.9
Grimstby	16,719	5,645	3.0
Lincoln	14,404	4,988	2.9
Niagara-on-the-Lake	12,359	4,600	2.7
Pelham	11,835	4,066	2.9

Source: 1986 Municipal Directory

number of households in these municipalities as well as the persons per household for each.

West Lincoln was substantially affected by the Province's change in the unconditional grants formulae because of its relatively large number of households. Prior to this change some unconditional grants were calculated on a per capita basis. West Lincoln was adversely affected by this change and is now partly relying on the Province's revenue guarantee to maintain its unconditional grant level.

2.2.1 PROPERTY ASSESSMENT

The Township of West Lincoln is one of the smallest municipalities in the comparison group. The total equalized assessment in West Lincoln is \$243 million while the average for the seven municipalities in the comparison group is \$326 million. This ranges from a low of \$150 million in the Township of Wainfleet to a high of \$450 million in Niagara-on-the-Lake. Notwithstanding this lower equalized assessment level, the commercial, industrial and business assessment in West Lincoln, when expressed as a percentage of total, approaches that of the other municipalities. Assessment in the business sector in West Lincoln represents 19% of total, while the comparison group averages 22%. This average includes the extremely high level of business assessment in

Thorold at 51%. If this commercialized municipality were excluded from the comparison for this one item, the level of commercial assessment in the comparison group would be 17%.

2.2.2 TAXATION

Tax revenue in West Lincoln in 1984 for local purposes only (excluding Region or School purposes) totalled \$1.1 million. This compares to the \$1.9 million average for the rest. This is not to say that actual taxation rates in the other comparison municipalities are higher. Residential tax per household in Thorold is one of the lowest in the sample set because of the substantially large commercial and industrial sector. West Lincoln, at \$271 per household, on the other hand, approaches the average of \$289 per household.

2.2.3 OPERATING REVENUE

West Lincoln's total operating revenue, at \$2.9 million is significantly lower than the average for the sample set of \$4 million. Because of West Lincoln's reliance on the MTC road subsidies, it has a much less dependence on taxation and other municipal revenues. Conditional grants in the Township represent 31% of the total operating revenues of the municipality. This is significantly higher than the average for the sample set of 14%. On the other hand, taxation in West Lincoln represents 37% of

revenue while the average for the sample set is 45%.

2.2.4 OPERATING EXPENDITURES

Total expenditures in West Lincoln, at \$2.9 million, are much lower than the average for the sample set of \$3.9 million. This reflects a municipality offering a reduced spectrum of services to a smaller community. As already pointed out, this smaller spectrum of services centres principally around the provision of roads. When expenditures are expressed as a percentage of total road maintenance and improvements in West Lincoln play a singularly prominent role. Table 2-11 describes this by comparing West Lincoln's expenditures to the average for the sample set. Also, Table 2-12 presents all data compared.

Table 2-11

	<u>EXPENDITURE COMPARISON</u>	
	<u>West Lincoln</u>	<u>Average for Sample Set</u>
Protection	6%	9%
Transportation	53%	39%
Environment	10%	17%
Recreation	10%	16%
Other	21%	25%

Note: The total for the sample set does not sum to 100% because each item represents the average for the comparison group for that expenditure category.

Table 2-12

1984 FINANCIAL COMPARISON
-- TOWNS UNDER 20,000 --

	WEST LINCOLN	WAINFLEET	THOROLD	GRIMSBY	LINCOLN	NIAGARA- ON-THE-LAKE	PELHAM
Population	9,836	5,983	16,086	16,719	14,404	12,359	11,935
Households	2,971	2,682	5,631	5645	4,988	4,600	4,066
Equalized Assessment (\$000's)	243,451	149,505	389,078	403,047	367,179	450,106	282,613
% Residential	81%	90%	49%	76%	79%	79%	90%
% Comm., Indust., and Bus.	19%	10%	51%	22%	21%	21%	10%
Taxation (General levy only)							
(\$000's)	1,072	668	3,087	2,707	2,184	1,998	1,391
Res. Tax/Household	271	213	244	347	330	326	289
Revenue (\$000's)	2,864	1,747	5,729	5,487	4,471	4,469.0	2,977
% Tax	37%	38%	54%	49%	49%	45%	46%
% Uncond. Grant	11%	13%	7%	10%	11%	5%	13%
% Ontario Cond. Grant	31%	15%	9%	8%	10%	9%	13%
% Other	21%	34%	30%	33%	30%	41%	28%
Expenditures (\$000's)	2,981	1,693	5,734	5,617	4,413	4,370	2,912
% Protection	6%	7%	13%	7%	8%	8%	17%
% Transportation	53%	32%	30%	23%	34%	22%	32%
% Environment	10%	6%	16%	28%	20%	23%	17%
% Recreation	10%	16%	18%	22%	14%	16%	14%
% Other	21%	39%	23%	20%	24%	31%	20%
Expenditures per Household							
Protection	59	44	132	70	72	76	122
Transportation	514	202	305	229	307	209	229
Environment	97	38	163	278	181	218	122
Recreation	97	101	183	219	126	152	100
Other	204	246	234	199	217	295	143
TOTAL	970	631	1,017	995	903	950	716

Source: 1984 Financial Statements and 1986 Municipal Directory

2.3 FINANCIAL REVIEW OF THE REGIONAL MUNICIPALITY OF NIAGARA

This section presents a financial review of the Regional Municipality of Niagara and includes, where possible, a five year historical summary for the years 1980 through 1984, inclusive. Also, a detailed examination is made for the last year of 1984.

2.3.1 POPULATION AND PROPERTY ASSESSMENT

The Region of Niagara is made up of twelve area municipalities -- five cities, five towns and two townships. The population of each municipality in 1984 is as follows:

Table 2-13

1985 POPULATION OF NIAGARA REGION		
Cities		
	St. Catharines	123,104
	Niagara Falls	71,088
	Welland	45,173
	Port Colborne	18,653
	Thorold	16,086
Towns		
	Fort Erie	24,073
	Grimby	16,719
	Lincoln	14,404
	Niagara-on-the-Lake	12,359
	Pelham	11,835
Townships		
	West Lincoln	9,925
	Wainfleet	5,983
	Total	369,402

Source: 1986 Municipal Directory

The growth rate in the Region has not been rapid. The population in the Region has increased by only 1.1% from 367,665 in 1980 to 371,600 in 1984. On the other hand, the number of households increased by 2.7% from 136,447 in 1980 to 140,099 in 1984. This higher growth in households results from a movement to slightly smaller household sizes over the period of study -- 2.9 persons per household in 1980 to 2.7 persons per household in 1984. Table 2-14 shows the level of population and the number of households in the Region for the period from 1980 through 1984 inclusive.

Schedule 2-14

REGION OF NIAGARA

POPULATION AND HOUSEHOLDS
1980 - 1984

	Population		Households		Persons Per Household
	#	% Increase	#	% Increase	
1980	367,665	-	136,477	-	2.7
1981	368,029	0.1%	125,895	-5.9%	2.9
1982	367,739	-0.1%	129,030	1.6%	2.9
1983	371,620	1.1%	139,965	7.7%	2.7
1984	373,010	0.4%	140,099	0.8%	2.7
	-	1.5%	-	2.7%	-

Source: Region of Niagara Financial Statements

Table 2-15 summarizes the amounts of property assessment which forms the tax base for the Region. This table totals the local taxable assessment for all the area municipalities. From

1980 to 1984 property assessment in the Region has grown by 5.8% going from \$838 million in 1980 to \$887 million in 1984. During this period, the residential and farm sector has grown more rapidly than the commercial, industrial and business sector -- 7.6% as compared to 2.5%, respectively. Because of this, residential and farm assessment now comprise a larger share of the total assessment base in the Region. In 1980, residential and farm assessment amounted to \$540 million, or 64.5% of total.

Table 2-15

REGION OF NIAGARA
TAXABLE ASSESSMENT
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984		Total
	\$	%	\$	%	\$	%	\$	%	\$	%	% Inc
Taxable Assessment											
Residential & Farm	540,374	64.5%	555,413	64.6%	562,896	64.6%	575,299	65.2%	581,628	65.6%	1.9%
Commercial & Industrial	297,915	35.5%	304,528	35.4%	308,134	35.4%	306,667	34.8%	305,578	34.4%	0.6%
Total	838,289	100.0%	859,941	100.0%	871,030	100.0%	881,966	100.0%	887,206	100.0%	1.4%
Equalization Factor	10.97		11.01		10.61		10.29		9.97		
Equalized Assessment	7,644,086		7,809,734		8,206,344		8,569,311		8,396,967		3.9%

Sources: Niagara Region Financial and Economic Survey

By 1984, this sector amounted to \$581 million, or 65.6% of total. Table 2-16 also provides a comparison of the relative sizes of the assessment in the residential and farm sector and the commercial, industrial and business sector in each of the area municipalities in 1984.

REGION OF NIAGARA
COMPARATIVE ASSESSMENT
1984

Table 2-16

	Residential & Farm	Commercial & Industrial
Niagara Falls	56%	44%
Port Colborne	61%	39%
St. Catharines	69%	31%
Thorold	49%	51%
Welland	56%	44%
Fort Erie	70%	30%
Gripshov	78%	22%
Lincoln	79%	21%
Niagara-on-the-Lake	78%	21%
Pelham	90%	10%
Mainfleet	90%	10%
West Lincoln	81%	19%
Average	68%	32%

Sources: Niagara Region Financial and Economic Survey

When applying the Province's equalization factors, which relate market values to property assessments, it is estimated that the value of taxable property in the Region of Niagara exceeds \$8.9 billion. On average, residential property assessment amounts to \$4,200 per household, which approximates \$42,100 when expressed on a market value basis using the derived aggregate equalization factor for the Region.

2.3.2 APPORTIONMENT OF THE REGIONAL LEVY

To determine the appropriate levy for each area municipality, net Regional costs are divided according to the relative amounts of assessment in each after several adjusting elements are included. To arrive at each share, rateable property is first expressed in terms of its market value using the equalization factors mentioned previously. This is done because assessment throughout the Province has not yet been standardized to the same base year. (Aggregating across different years of valuation would distort the tax paying ability of rate payers in different municipalities.) A discount factor then is applied to residential and farm assessment. This factor relates the derived market value to a standard previously established by the Province. Equivalent assessment relating to Federal and Provincial facilities is then added to the calculation. This last step is included so that a full expression of the municipalities wealth, or tax paying

ability, can be taken into consideration. The assessment related to the proposed OWMC facility would be included in the apportionment exercise at this stage. The full apportionment calculation is reproduced in Appendix C.

Table 2-17

REGION OF NIAGARA
APPORTIONMENT OF THE REGIONAL LEVY
1990 - 1994
(\$000's)

	1990		1991		1992		1993		1994	
	Levy	%	Levy	%	Levy	%	Levy	%	Levy	%
Niagara Falls	8,690	21.5%	6,617	21.7%	7,991	22.4%	8,309	21.9%	9,487	22.5%
Port Colborne	2,128	4.4%	1,340	4.4%	1,732	4.9%	1,898	5.0%	2,042	4.9%
St. Catharines	8,421	32.7%	10,018	32.9%	10,990	30.9%	11,650	30.7%	12,869	30.5%
Thorold	1,818	5.4%	1,511	5.0%	1,675	4.7%	1,970	5.2%	2,168	5.1%
Welland	3,281	12.9%	3,847	12.6%	4,270	12.0%	4,527	11.9%	4,916	11.7%
Fort Erie	1,244	5.9%	1,809	5.9%	2,303	6.4%	2,457	6.5%	2,674	6.3%
Grimsby	992	3.3%	1,172	3.9%	1,452	4.1%	1,519	4.0%	1,730	4.1%
Lincoln	928	3.6%	1,125	3.7%	1,350	3.8%	1,471	3.8%	1,579	3.8%
Niagara-on-the-Lake	1,221	3.9%	1,271	4.1%	1,714	4.8%	1,818	4.9%	2,065	4.9%
Pelham	489	2.5%	771	2.5%	897	2.5%	953	2.5%	1,074	2.5%
Mainfleet	313	1.2%	344	1.1%	481	1.3%	520	1.3%	566	1.3%
West Lincoln	278	2.2%	668	2.2%	852	2.4%	916	2.4%	997	2.4%
Total	28,421	100.0%	30,453	100.0%	35,699	100.0%	37,929	100.0%	42,166	100.0%

Sources: Niagara Region Financial and Economic Survey

Table 2-17 presents a summary of the Regional levy for each of the area municipalities in Niagara for the years, 1980 through 1984. West Lincoln's share was 2.4% in 1984 and this has increased from 2.2% in 1980. In dollar terms, their levy has increased because of both assessment growth and higher Regional costs, from \$575,000 in 1980 to \$997,000 in 1984. The largest share of the Regional levy falls to the City of St. Catharines which paid 30.5%, or \$12.9 million in 1984.

2.3.3 OPERATING REVENUE

Operating revenue for the Region of Niagara is mainly derived from three sources: the general levy, Provincial grants and waterworks and sanitary sewerage rate receipts. In 1984, operating revenues for the Region totaled \$137 million. Of this \$42 million, or 31% was collected on the General Levy; \$57 million, or 42%, was received from the Province in the form of conditional and unconditional grants; and \$27 million, or 20%, was billed in water and sewer revenue. The balance of \$10 million, or 8%, represented fees, service charges, interest earnings and other miscellaneous funds.

Of the Provincial grants received by the Region, \$20 million were unconditional and represent the Resource Equalization, General Support and per household general assistance. The \$37

million received for specific purposes was provided mainly for the Social Services programmes operated by the Region. These include general welfare assistance, homes for the aged, day care and family counselling. The Region also received road subsidies from the Ministry of Transportation and Communications. In 1984 this assistance amounted to \$5.6 million, which generally represented a rate of 50% to 55% of eligible expenditures.

Revenues for the wholesale of water and sanitary sewerage services to the area municipalities have increased considerably from 1980, at \$13.5 million to 1984 at \$26.8 million. This increase was due to the phase out of two reserve funds used for these operations. First, in the 1970's the Region moved to a uniform water and sewer rate structure and made use of a rate stabilization fund to buffer the effect of phasing in the new rate tables. Secondly, the Region previously maintained a capital reserve fund to assist in financing some extensive upgrading of the sewerage system. These funds have since been eliminated with all capital costs being collected as a surcharge on the existing wholesale rate structure.

Table 2-18 summarizes the major revenue sources for the Region for the years 1980 through 1984 and Table 2-19 provides a detailed breakdown of revenues for 1984.

NIAGARA REGION

Table 2-18

OPERATING REVENUE
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984		2 Inc
	\$	%	\$	%	\$	%	\$	%	\$	%	
General Levy	26,421	31.3%	30,453	30.3%	35,598	31.6%	37,929	29.4%	42,166	30.9%	39.6%
Water and Sewer	13,491	16.0%	18,907	18.6%	22,047	19.5%	25,028	19.4%	26,818	19.6%	99.3%
Grants	37,056	43.3%	42,564	42.3%	45,633	40.4%	57,921	41.7%	56,807	41.9%	57.3%
Fees & Service											
Charges	5,392	6.4%	6,787	6.7%	7,710	6.8%	8,436	6.5%	9,204	6.7%	76.7%
Other	2,154	2.5%	2,261	2.2%	1,914	1.7%	3,943	3.0%	1,974	1.4%	-8.4%
TOTAL	84,514	100.0%	100,972	100.0%	113,002	100.0%	129,095	100.0%	136,969	100.0%	62.1%
Annual Percent Increase											
General Levy		23.4%		17.2%		9.1%		9.5%			
Grants		15.1%		7.0%		17.9%		3.5%			
Fees & Service											
Charges		25.9%		13.6%		9.4%		9.1%			
Other		5.0%		-12.3%		100.7%		-49.7%			
TOTAL		19.5%		11.9%		14.2%		6.1%			

Source: Niagara Region Financial and Economic Survey

REGION OF NIAGARA

Table 2-19

OPERATING REVENUES
1984

Taxation		
-Own Purposes	42,165,789	30.8%
-Water & Sewer Billings	26,818,334	19.6%
SUBTOTAL	68,984,127	50.4%
Unconditional Grants		
-Per Household General	4,169,950	
-Per Household Police	6,571,355	
-Special Assistance	612,000	
-Resource Equalization	4,470,168	
-General Support	4,115,678	
-Revenue Guarantee	181,019	
SUBTOTAL	20,049,167	14.6%
Conditional Grants		
-Transportation	5,608,608	
-Environment	167,950	
-Health	318,607	
-Social Service	27,715,502	
-Other	91,695	
SUBTOTAL	36,769,929	26.8%
Other Revenue	2,074,103	1.5%
Fees, Service Charges	9,082,303	6.6%
SUBTOTAL	11,156,406	8.2%
TOTAL REVENUE	136,969,527	100.0%

Source: Region of Niagara
Financial Statements

2.3.4 OPERATING EXPENDITURES

In 1984, the Region of Niagara incurred operating expenditures totalling \$136 million in seven functional departments. The largest portion of operating costs were allocated to Social and Family Services which incurred \$44 million, or 32% of total expenditures. The second largest expenditure was for Police protection which approached \$33 million, or 25% of expenditures. Waterworks and sanitary sewerage comprised the third major cost centre, totalling \$29 million, or 21%. The other Regional departments -- General Government, Transportation, Health and Planning and Development -- accounted for the balance of expenditures, 22% of total at \$30 million.

Expressed on a per household basis, the Region of Niagara incurred operating expenditures in 1984 that total \$954 per household: \$307 per household for social services; \$230 per household for police protection; \$200 per household for waterworks and sanitary sewerage and \$217 per household for the other Regional government services. The following tables provide further details. Table 2-20 presents a summary of department expenditures for each of the years from 1980 through 1984 and Table 2-21 outlines the per household expenditure trends in the Region for the same time frame.

Table 2-20

REGION OF NIAGARA
OPERATING EXPENDITURES
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984		Increase
	\$	%	\$	%	\$	%	\$	%	\$	%	
General Government	8,179	6.1%	8,535	6.6%	9,726	8.5%	9,954	8.9%	10,107	7.4%	93.2%
Protection	22,413	26.6%	24,489	26.6%	29,607	26.0%	31,614	24.4%	33,122	24.3%	47.3%
Transportation	11,170	13.3%	12,472	12.5%	13,351	11.7%	13,452	10.4%	14,019	10.3%	25.5%
Environment	15,753	18.7%	20,329	20.5%	23,017	20.2%	28,221	21.6%	28,933	21.1%	67.0%
Health	2,960	3.5%	3,542	3.5%	3,449	3.0%	4,694	3.6%	4,945	3.6%	67.1%
Social Services	25,959	30.7%	29,054	29.2%	33,619	29.5%	41,311	31.6%	43,243	32.1%	69.6%
Recreation	24	.0%	0	0.0%	17	.0%	200	0.2%	12	.0%	-50.0%
Planning	905	1.1%	980	1.0%	1,173	1.0%	1,289	1.0%	1,509	1.1%	66.7%
Total	84,262	100.0%	99,400	100.0%	113,959	100.0%	129,735	100.0%	136,389	100.0%	61.9%

Source: Niagara Region Financial and Economic Survey

Table 2-21

REGION OF NIAGARA
PER HOUSEHOLD REGIONAL EXPENDITURES
1980 - 1984

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
General Government	38.04	47.90	68.64	62.69	70.72
Protection to Persons and Property	164.57	194.18	208.96	221.31	231.74
Transportation Services	82.03	91.42	94.22	94.17	98.07
Environmental Services	115.67	149.04	162.45	197.55	201.73
Health Services	21.74	25.97	24.34	32.86	34.61
Social & Family Services	189.86	213.00	237.25	289.20	306.77
Recreation and Cultural Services	0.19	-	0.13	1.40	0.08
Planning and Development	6.64	7.18	8.27	9.02	10.56
	-----	-----	-----	-----	-----
TOTAL	618.73	728.70	804.26	908.21	954.28

Source: Niagara Region Financial and Economic Survey

2.3.5 CAPITAL EXPENDITURES AND FINANCING

As of December 31st, 1984, the Region of Niagara was carrying long term liabilities totalling \$99.4 million. The largest portion of this was for waterworks and sanitary sewerage which totalled \$83.9 million.

All municipalities are required to submit their capital expenditure budgets to the Ontario Municipal Board (OMB). The criteria that the OMB uses to base its approvals relate to the municipality's ability to take on new debt. As a guideline, the OMB does not permit any more than 20% of the operating expenditures to be allocated to debt repayment (including principal and interest). Using this criteria, the Region of Niagara estimates in its 1984 Financial and Economic Survey that even though its outstanding debt totals \$100 million it still has available debt capacity for an additional \$64 million.

For the five years from 1980 to 1984, the Region's average annual level of capital expenditures amounted to \$21.7 million. These costs have ranged from a low of \$17.4 million in 1983 to a high of \$26 million in 1982 and were mainly for environmental and transportation services. To finance these costs the Region relied on long term liabilities, provincial grants and reserves and reserve funds. On average, the Region borrowed \$9.6 million per year. Provincial grants and subsidies averaged \$4.8 million per year, with reserves and reserve funds averaging \$6.3 million

annually. In summary, over the five years the Region financed about 45% of its capital programme through debentures, 30% by internal funds and the general levy with the remainder being provided from the Province. These figures are shown in detail for the 1980 to 1984 period on Table 2-22.

2.3.6 RESERVE FUNDS

As of December 31st, 1984, the Region of Niagara maintained reserve fund balances of \$15 million. Of this amount \$2.3 million were working reserves that were readily available for operational use. A further \$6.4 million was maintained for capital purposes, with \$1.8 million held for equipment replacement and \$2.1 million set aside for insurance, workmen's compensation and sick leave payout.

These balances represent 10% of the Region's operating expenditures. This is not a large amount relative to the activity that is conducted. Although balances for capital expenditures total \$6.4 million, the previous section showed that the Region averaged \$6.3 million contributions from internal funds annually. In effect, the Region is handling its internal capital financing via the general levy and user wholesale rates with only a temporary stop over in the capital reserve fund. Table 2-23 summarizes the reserve and reserve fund balances in the Region as of December 31st, 1984.

Table 2-22

REGION OF NIAGARA

CAPITAL FUND TRANSACTIONS
1980 - 1984
(\$000's)

	1980		1981		1982		1983		1984	
	\$	%	\$	%	\$	%	\$	%	\$	%
Unfinanced Capital										
Beginning of Year	3,020		5,293		5,792		2,297		(2,494)	
Capital Outlay										
General	340	1.5%	624	2.8%	5,352	20.3%	2,100	15.1%	457	2.7%
Protection	963	4.2%	1,022	4.5%	212	0.8%	1,416	8.1%	2,437	12.2%
Transportation	9,774	42.2%	9,151	41.3%	7,918	30.5%	7,038	40.4%	6,335	31.7%
Environment	11,326	48.9%	9,525	43.0%	11,973	46.1%	4,581	26.3%	9,633	48.2%
Health	3	.0%	0	0.0%	8	.0%	0	0.0%	8	.0%
Social Services	570	2.5%	821	3.7%	394	1.5%	234	1.4%	752	3.8%
Other	162	0.7%	1,000	4.5%	225	0.9%	2,042	11.7%	387	1.9%
Total	27,138	100.0%	22,143	100.0%	25,959	100.0%	17,412	100.0%	20,005	100.0%
Capital Financing										
Revenue Fund	2,552	12.2%	2,673	12.3%	1,748	5.9%	2,032	9.2%	2,584	12.2%
Reserves	3,373	16.2%	4,091	18.9%	3,475	11.8%	5,092	22.9%	3,993	18.9%
Liabilities	7,764	37.2%	5,757	24.7%	17,708	60.1%	9,891	44.5%	7,057	33.2%
Grants	2,784	13.3%	5,237	24.2%	4,964	16.9%	3,823	17.2%	7,258	34.2%
Other	4,392	21.0%	4,290	19.8%	1,598	5.4%	1,361	6.1%	345	1.6%
Total	20,865	100.0%	21,844	100.0%	29,484	100.0%	22,204	100.0%	21,237	100.0%
Unfinanced Capital										
End of Year	5,293		5,792		2,297		(2,494)		(3,726)	

Source: Niagara Region Financial and Economic Survey

Table 2-23

REGION OF NIAGARA
RESERVES AND RESERVE FUND BALANCES

Working Funds	1,469,363
Contingencies	869,257
Replacement of Equipment	1,757,505
Sick Leave	663,908
Insurance	698,971
Workmen's Compensation	690,684
Capital Expenditure	
-- general administration	751,212
-- roads	2,829,776
-- sanitary and storm sewers	891,910
-- water	918,912
-- other and unspecified	965,024
Debtenture Repayment	1,915,548
Library Current Purposes	
-- Health Unit - Future Expenditures	110,576
-- Rate Stabilization - Water Fund	515,754

TOTAL	14,944,300

Source: Niagara Region Financial Information Return

2.4 BOARDS OF EDUCATION

There are four school boards operating within the Region of Niagara, however only two contain the Township of West Lincoln within their jurisdiction. These boards are:

The Lincoln County Public School Board, and

The Lincoln County Roman Catholic School Board.

The other two school boards operate in the south east end of the Niagara Peninsula and are not considered in the analysis because of their distance from West Lincoln.

In 1984 pupil enrollment in the Lincoln County Public School Board totalled 17,899. This was comprised of 7,197 elementary school pupils in 28 schools and 10,702 pupils at the secondary level in 13 schools.

Three elementary schools operate in the Township of West Lincoln -- Caister, College Street and Gainsborough -- and these contained a total of 1,150 pupils in 1984 (285, 491 and 374 pupils respectively). There is one secondary school operating in West Lincoln, and this contains 300 students.

In 1984 enrollment in the Lincoln County Roman Catholic School Board totalled 7,280 students in 26 schools. Only one school operates in West Lincoln, St. Martin School, and this contains a total of 168 pupils up to the Grade 8 level.

2.4.1 EDUCATION LEVIES

School board costs are allocated on the basis of each municipality's weighted equalized assessment. As a result, the Lincoln County Board of Education levied a total of \$2.4 million on West Lincoln in 1984. This represented 6% of the total. On the other hand, the separate school board levied \$109,424 on the Township in 1984 and this represented 3% of their requirement.

Table 2-24

	1984 COST SHARING RATIOS Percent		
	LCRCSB	LCBE-E	LCBE-S
West Lincoln	3%	6%	6%
St. Catharines	74%	64%	66%
Grimby	94%	9%	9%
Niagara-on-the-Lake	7%	11%	10%
Lincoln	8%	9%	9%
Province	2%	1%	0%
	100%	100%	100%

LCRCSB: Lincoln County Roman Catholic
Separate School Board

LCBE-E: Lincoln County Board of Education
Elementary

LCBE-S: Lincoln County Board of Education
Secondary

Approximately 91% of the rate payers in West Lincoln are public school supporters. During the five years from 1980 to 1984 public school assessment grew by 2.4%. Separate school assessment, however, has grown much more rapidly, at 6%, for the same period. This is shown on Table 2-25 along with the assessment level of the other municipalities in the school boards' jurisdiction.

2.4.2 OPERATING REVENUES AND EXPENDITURES

Provincial grants represent 52% of the Lincoln County Public School Board's revenues, while 80% of the separate board's revenues are derived from Provincial assistance. These grants have increased by 24% over the five years from 1980 through 1984 for the public board and 49% in the separate board. Similarly, taxation has increased much more rapidly in the separate board also at 49% as compared to 33% for the public board.

Costs relating to instruction naturally carry the largest share of expenditures for the school boards. For the public board, 77% of total expenditures are used for instruction while 72% is incurred by the separate board. The remaining expenditures in both boards represent school operation and maintenance, capital expenses, administration and transportation costs. Over the period of 1980 to 1984 instruction costs have increased by 34% in the public board and by 49% in the separate board.

Tables 2-26 and 2-27 summarize revenues and expenditures, respectively, for both school boards operating within West Lincoln. These summaries include historic comparisons for the years of 1980 through 1984.

Table 2-25

ASSESSMENTS USED TO SUPPORT THE SCHOOL BOARDS
1990 - 1994
(\$000s)

ELEMENTARY AND SECONDARY SCHOOLS - LINCOLN COUNTY BOARD

Area Municipalities Within Board	1990	1991	1992	1993	1994	Annual Avg. Compounded Rate of Change %
St. Catharines	471,866	479,778	487,217	493,371	500,124	1.3
Grimsby	56,260	59,498	60,884	61,426	63,288	2.7
Lincoln	48,242	49,879	51,484	52,887	53,740	1.9
Niagara-on-the-Lake	43,713	45,601	46,479	46,780	47,888	2.1
West Lincoln	31,088	31,879	32,968	33,721	34,267	2.4
TOTAL	651,069	665,535	679,828	692,465	700,507	1.6

SEPARATE SCHOOLS - LINCOLN COUNTY ROMAN CATHOLIC BOARD

Area Municipalities Within Board	1990	1991	1992	1993	1994	Annual Avg. Compounded Rate of Change %
St. Catharines	40,954	41,951	44,488	45,416	46,716	3.1
Grimsby	4,049	4,218	4,862	4,897	5,111	6.8
Lincoln	2,287	2,351	2,412	2,597	2,704	4.3
Niagara-on-the-Lake	2,256	2,358	3,079	3,159	3,217	3.3
West Lincoln	1,261	1,364	1,479	1,500	1,559	6.0
TOTAL	51,307	52,842	56,240	57,669	59,297	3.8

Source: Region of Niagara Economic and Financial Survey

Table 2-25

EXPENDITURES OF THE SCHOOL BOARDS
1980 - 1984
(\$000s)

ELEMENTARY AND SECONDARY SCHOOLS - LINCOLN COUNTY BOARD

	1980	1981	1982	1983	1984	Annual Average Amount	%
Instruction	54,150	59,042	64,529	69,489	72,670	64,046	77.1
Plant Operation and Maintenance	7,574	8,570	9,480	10,025	10,381	9,189	11.1
Debt Charges	2,000	2,389	2,329	2,312	2,115	2,386	2.8
Other	6,976	6,954	8,548	7,871	7,792	7,609	9.0
TOTAL	71,000	76,955	84,886	89,696	92,958	82,920	100.0

SEPARATE SCHOOLS - LINCOLN COUNTY ROMAN CATHOLIC BOARD

	1980	1981	1982	1983	1984	Annual Average Amount	%
Instruction	10,373	11,495	13,381	14,921	15,472	13,168	72.2
Plant Operation and Maintenance	1,540	1,938	2,049	2,216	2,450	2,029	11.2
Debt Charges	890	849	848	791	748	827	4.5
Other	1,702	1,925	2,571	2,210	2,792	2,312	12.1
TOTAL	14,505	16,207	18,849	20,138	21,462	18,346	100.0

Source: Region of Niagara Economic and Financial Survey

Table 2-27

REVENUES OF THE FORMER LINCOLN COUNTY SCHOOL BOARD
1990 - 1994
(\$000s)

PUBLIC, ELEMENTARY AND SECONDARY SCHOOLS - LINCOLN COUNTY BOARD

	1990	1991	1992	1993	1994	Annual Average Amount	%
Taxation	32,618	34,700	38,000	40,150	43,296	37,753	45.4
Contributions from Ontario Government	37,474	41,357	45,800	45,946	46,518	43,799	52.7
Contributions from Federal Government	67	45	31	519	316	195	0.2
Transfers from Reserves	172	50	657	2,192	1,718	959	1.2
Other Revenues	909	699	700	733	775	767	0.9
TOTAL	71,279	76,750	85,188	89,540	92,623	87,268	100.0

SEPARATE SCHOOLS - LINCOLN COUNTY ROMAN CATHOLIC BOARD

	1990	1991	1992	1993	1994	Annual Average Amount	%
Taxation	2,409	2,538	2,959	3,380	3,539	2,975	16.3
Contributions from Ontario Government	11,673	13,103	15,287	15,982	17,337	14,676	80.4
Contributions from Federal Government	-	-	-	-	-	-	-
Transfers from Reserves	-	-	-	8	-	2	-
Other Revenues	567	547	567	744	556	595	3.3
TOTAL	14,649	16,188	18,813	20,114	21,431	18,248	100.0

Source: Region of Niagara Economic and Financial Survey

CHAPTER 3
MUNICIPAL FINANCE IMPACT

3.1 THE REGIONAL MUNICIPALITY OF NIAGARA

The Municipal Finance Impact Analysis was conducted using the computer model developed specifically for this study. This model is presented in Appendix A. The evaluation also incorporated discussions held with senior officials from the Township and Region.

3.1.1 PROPERTY ASSESSMENT TAX BASE

The establishment of the OWMC facility does not have a large effect on the Region of Niagara. The property assessment from the OWMC facility and the induced growth adds less than 2% to the Region's existing tax base. Since assessment in each municipality is founded on different cost bases, assessment in each municipality cannot be directly added. When expressed in terms of market value (using the Provincial equalization factors for all municipalities in the Region), the establishment of the OWMC facility effectively adds \$130.8 million to the Region's 1984 base of \$7.7 billion.

Included in the estimates for induced residential assessment growth is a provision for 55 new households in Niagara Region. This excludes a local purchasing policy by OWMC. With such a policy, new households could increase to 69, however, this is covered in the sensitivity analysis. This is derived by the report Site Assessment, Phase 4B: Economic Impact, 1987, prepared by Morehouse Economic Planning Consultants. The property assessment from these new households is calculated using average housing assessment levels currently in the Region. This approach may understate potential additional residential assessment since the average includes a combination of old and new housing. If all in-coming residents purchased new homes the additional assessment would be larger, but then, so would the tax revenue in the respective municipalities. Because of this latter aspect the approach is considered to be conservative.

3.1.2 EXPENDITURE IMPACTS

Additional costs to the Region are described as either operating expenditures or capital expenditures.

3.1.2.1 Operating Expenditure Impacts

Annual Regional operating expenditures are forecast to increase by \$147,500 because of the establishment of the OWMC facility. This includes General Government, Police, Roads, Emergency Measures,

Water and Sewer Distribution, Health, Social Services, Planning and Development. The expenditure estimates for each department are based on components for: the cost per household for new residents moving into the Region; costs related to induced commercial growth within West Lincoln; and direct annual cost requirements of the OWMC facility. Through interviews held with most of the Department Heads, it appears that there may be some services that will not experience any cost changes because of the small number of new households. It is not expected, for example, that the Police Force will require further manpower, vehicles or equipment to service an added 55 households scattered throughout the Region out of a total of 140,000 now being serviced.

Direct annual operating expenditures are forecast to occur in three areas: additional liability insurance premiums (\$30,000-General Government); extra winter maintenance on Regional Road #24 (\$10,000-Transportation) and added health inspection requirements (\$50,000-Health Unit).

It is not expected that the Region would be liable in the event of a spill. Because of the type of facility being proposed, however, the Region's insurance premiums may be affected. This will largely depend on the agreement that may be signed between the Region and the OWMC. In the interim, however this allowance represents 10% of the current level of premiums paid by the Region. Regardless of these events, there still may be additional

involvement in administering claims which may be brought against the Region incorrectly.

Although Regional officials do not anticipate reconstructing Region Road #24 to handle the additional truck volume, extra winter road maintenance may be necessary. Because of the substances that will be carried the Police, Emergency Measures Office and the Works Department agree that the road segment should be kept free of ice and snow to avoid accidents. The region could not determine the amount of these costs at the time of writing, however, \$10,000 per year has been provided as a contingency.

Annual health inspection requirements will be discussed in the monitoring programme that is established between the Region and the OWMC. Pending finalization of these areas, the above mentioned allocation is made to recognize the possible substantial involvement by the Health Unit in its concern for air and ground water quality. This item also is provided as a further contingency for other monitoring needs as they arise.

3.1.2.2 Capital Expenditure Impacts

Additional up front capital expenditures are expected to total \$100,000 before the OWMC facility proceeds. This represents \$50,000 for possible up front health monitoring since the Niagara Health Unit has suggested that a Region wide health survey prior to the establishment of the OWMC facility may be warranted. While

this could cost much more, it could also be argued that such a survey should not be completely funded by the OWMC since the study would benefit several other medical areas. A further \$50,000 provision for planning requirements arising from the induced growth effects is also included. Besides these capital expenditures it is expected that \$300,000 for professional fees related to technical reviews will be required by the Region prior to the OWMC hearing. These, however, will be offset by OWMC.

3.1.3 REVENUE IMPACTS

Induced annual revenue impacts result in a \$44,700 increase in Regional non-tax receipts. Some revenue increases are the result of added households which affect the Provincial unconditional grants and increased user flow on the Region's wholesale water and sewer rates. Other revenue increases result because extra costs are incurred. The Provincial unconditional grants for Social Services and Roads are designed to offset expenditures and, therefore, increase as expenditures rise. Because of the apportionment system used for dividing the Region levy among the area municipalities, the Region share of payments in lieu of taxes is described in the mill rate summary section of this report.

3.2 THE TOWNSHIP OF WEST LINCOLN

3.2.1 PROPERTY ASSESSMENT ESTIMATE OF THE OWMC FACILITY

The preliminary property assessment estimate of the OWMC facility is based on the design costs for a 150,000 tonne per annum facility prepared by Monenco Limited (shown in Appendix B). These total \$57.5 million for land and buildings, exclusive of equipment. To relate the realty construction estimates to the local property assessment base, the analysis employed the industrial class equalization factor for West Lincoln as provided by the Ministry of Revenue who concur with the approach. These factors relate local assessment to estimates of market value.

Property assessment related to the OWMC facility is not directly taxable as defined by the Assessment Act, but is instead, exempt property because it is a government facility. Notwithstanding this, however, the payments in lieu of taxes will be levied on OWMC by West Lincoln in the same way as property taxes. For this reason, OWMC assessment is treated as taxable property for the purposes of this analysis.

The assessment related to the OWMC facility is not directly taxable since it is exempt property related to a Provincial establishment. Notwithstanding this, however, the payments in lieu of taxes will be calculated in the same way as property taxes. For this analysis, therefore, the OWMC exempt property is

treated as taxable.

In total, the establishment of the OWMC facility and its related growth effects will add \$13.9 million in property assessment to the Township's 1984 tax base of \$15.7 million. This represents an 87% increase in the property tax base and will bring the Township's total assessment to \$29.6 million. This includes the direct assessment related to the facility as well as the induced growth effects for commercial activity in West Lincoln; additional residential assessment; the lost farm assessment that the OWMC facility will replace; and a provision for reduced property values in the surrounding area. The following summarizes

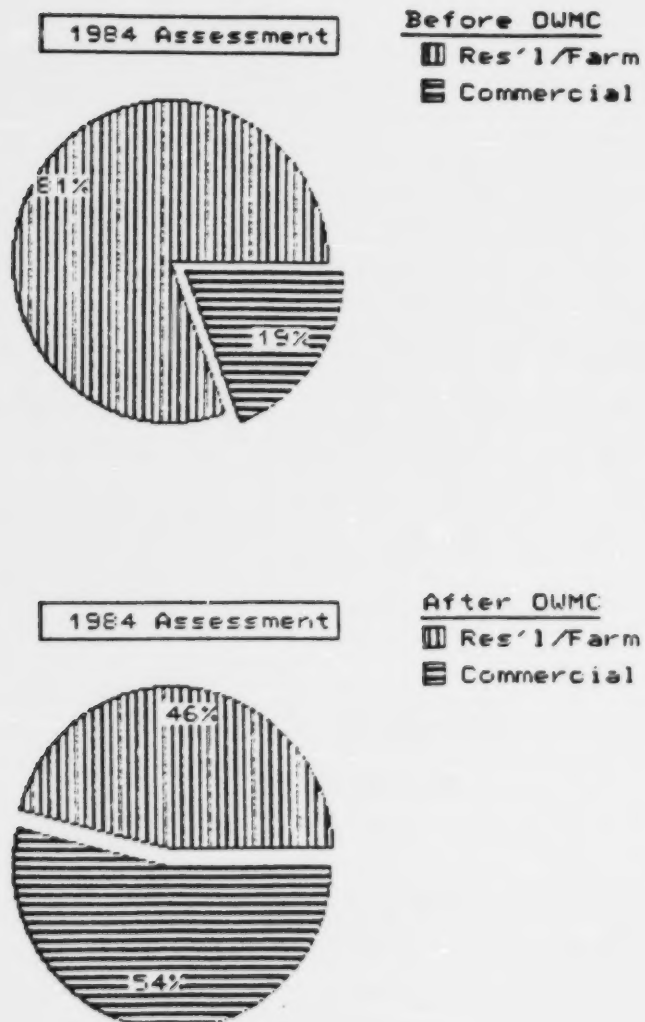
these components and the change to West Lincoln's tax base is shown in Figure 3-1.

OWMC Realty	\$8,470,000
Business Assessment	5,082,000
Induced Commercial Activity	225,000
Business Assessment	67,500
New Residential Assessment	82,100
Loss of Site Farm Assessment	(23,000)
Provision for Property Value	
Decreases	(25,000)

	\$13,878,600

Figure 3-1

TOWNSHIP OF WEST LINCOLN
IMPACT ON PROPERTY ASSESSMENT



Included in the estimates for residential assessment growth is a provision for 20 new households in West Lincoln. A local purchasing policy could increase the number of new households to 27 and this higher level is covered in the sensitivity analysis. (The derivation of this estimate and a description of the induced growth effects is contained in the report Site Assessment, Phase 4B: Economic Impact, 1987, prepared by Morehouse Economic Planning Consultants. This report also describes the effects on property values.) The property assessment from these new households is calculated using average Regional housing assessment levels. Since household averages for the Township include farm properties Regional averages were used to more closely approximate family housing. This approach also may understate potential additional residential assessment since the average includes a combination of old and new housing. If all in-migrating residents purchased newer homes the additional assessment would be larger. Since the related tax revenue accruing to the Township would also be larger the approach is considered to be conservative.

New household estimates are also used in determining some of the municipal expenditure and revenue impacts described below. To this end, the municipal finance analysis is concerned with new households moving into West Lincoln and not the full number of possible local residents who may work at the OWMC facility. This latter group already pay property taxes and demand and make use of the services provided by the Township. New residents will require

additional services. In addition, the above mentioned Economic Impact Study also comments on possible out-migration. In that report all out-migrating houses are expected to be re-occupied, however, worst case conditions may decrease the above growth estimates by 10 households. This eventuality is considered in the sensitivity analysis presented below.

3.2.2 EXPENDITURE IMPACTS

3.2.2.1 Operating Expenditure Impacts

Operating expenditures are only forecast to increase by \$116,800 annually on a 1984 level of expenditures of \$2.3 million. Included in these additional expenses is a \$50,000 provision for an additional full time staff member employed by the Township to monitor possible future OWMC impacts; an amount of \$10,000 per year for extra winter road maintenance to accommodate the movement of employee traffic (construction and operations) should Provincial or Regional roads not be used for home to work trips; and \$5,000 as a contingency for possible increased liability insurance premiums. The balance of the operating cost increases relate to the additional service required by the new households and businesses. Since this induced growth is relatively low, these related costs only approach \$52,000.

With respect to increased liability insurance costs, it is not expected that the Township would be liable in the event of a

spill since there will be no direct ownership or control of the toxic materials. Because of the type of facility being proposed, however, the Township's insurance premiums may be affected. This will largely depend on the agreement that may be entered into between West Lincoln and the OWMC. In the interim, however, this allowance represents 10% of the current level of premiums now paid. Regardless of these events, and notwithstanding Part IX of the Environmental Protection Act there still may be additional involvement by West Lincoln in administering claims which may be brought against the Township incorrectly.

3.2.2.2 Capital Expenditure Impacts

Additional up front capital expenditures are expected to total \$200,000 before the OWMC facility proceeds. This includes a provision of \$100,000 for emergency response and roads maintenance equipment; \$50,000 for added planning and development impacts and \$50,000 as a provision for the new household share of recreational and cultural facilities that may be required. Moreover, any commercial growth will not be such that would require municipal capital expenditures. Also, \$300,000 for professional fees related to technical reviews will be incurred prior to the hearing, however, these will be offset by OWMC.

3.2.3 REVENUE IMPACTS

The payments in lieu of taxes made by the OWMC to West Lincoln could approach \$772,000 annually in the base impact scenario. This excludes mitigation compensation and building permit fees.

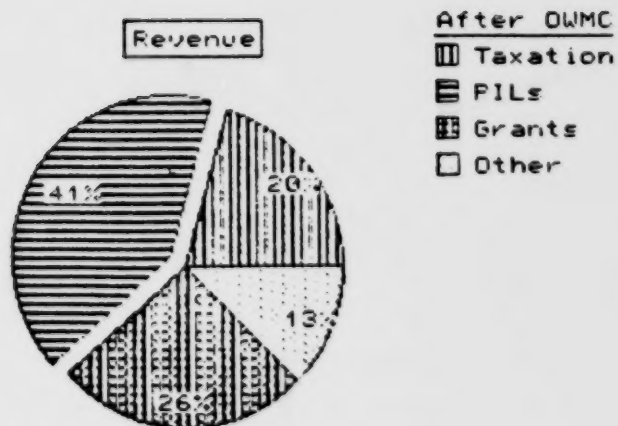
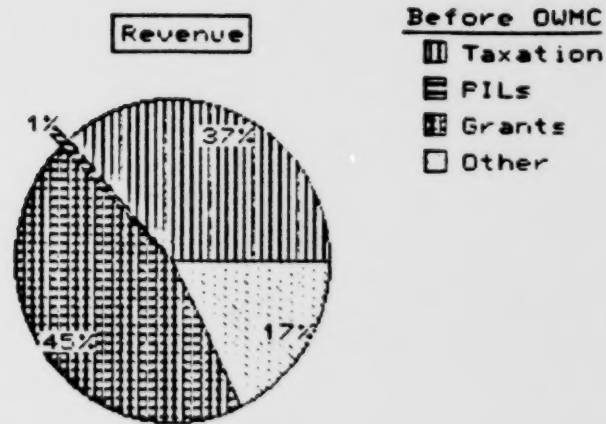
In addition, induced revenue impacts represent those impacts on non-tax revenues that can result from several sources such as: changes to Provincial grant levels because of the formulae used to calculate the grants; increased programme revenue because of additional demands for service; or, changes to water receipts because of changes in the number of users. Because of the establishment of the OWMC facility, operating revenues may decrease by \$63,000. This represents 3.5% of the total non-tax revenue base of \$1.8 million. While some programme revenue increases are experienced, two significant grant reductions relate to the Township's road subsidies (reduction of \$76,800) from the Ministry of Transportation and Communications, and the Resource Equalization Grant (reduction of \$8,200) paid by the Ministry of Municipal Affairs. The determination of the MTC's road subsidies includes an allowance for property assessment. The assessable property related to the OWMC, therefore, causes a reduction in the amount of assistance that will be paid by the MTC to West Lincoln. Similarly, the Resource Equalization Grant is provided by the Province to those municipalities that have a deficiency in property assessment, when compared to Provincial averages. The added OWMC assessment represents additional wealth to the Township

and this totally eliminates the grant. These changes to the Township's revenue profile are shown on Figure 3-2.

Figure 3-2

TOWNSHIP OF WEST LINCOLN

IMPACT ON REVENUES



3.2.4 WEST LINCOLN'S SHARE OF THE REGIONAL LEVY

To determine the appropriate levy share for each area municipality in Niagara, Regional costs are divided according to the relative amounts of assessment. Rateable property is expressed in terms of market value using the Provincial equalization factors that relate assessment to property value. After residential and farm property are discounted, the assessment related to Federal and provincial facilities is added. The assessment of the OWMC plant would be included in the apportionment procedure at this last stage. The full apportionment calculation is reproduced in Appendix C.

Due to the substantial OWMC additions to the Township's assessment base, the apportionment of the Regional levy has the single largest effect on West Lincoln.

- a) West Lincoln's share of the regional levy can potentially increase from 2.4%, or \$997,200, to 5.4%, or \$2.3 million.
- b) Because of the Provincial formula used for calculating the payments in lieu of taxes, the Regional share of the OWMC PIL may total \$1,050,000 only. This leaves a shortfall of \$245,800 to be paid by the existing community through their property taxes.
- c) Since West Lincoln's share of the Regional levy increases

by \$1.3 million, all other municipalities will benefit because their levies will reduce by a corresponding amount (net of the increase in the Region's operating cost). The amount of the benefit that each other municipality enjoys will be proportional to its share of assessment. Determining the specific tax savings to the rate payers of these other municipalities, however, is beyond the scope of this report.

3.3 BOARDS OF EDUCATION

3.3.1 ENROLLMENT

Meetings to identify possible OWMC related impacts were held with school board officials from both the Lincoln County School Board and the Lincoln County Roman Catholic School Board. Although these discussions were preliminary, both indicated that the low number of new households forecasted (20 new households in West Lincoln and 55 throughout the Region) would not cause significantly large added costs to accommodate the associated students. The potential pupil enrollment from this small number of families could be absorbed into the current schools, assuming that the distribution of children's ages, and therefore grade levels, was reasonably dispersed. This becomes particularly true when considering out-migration. The Phase 4B Site Assessment Report on Economic Impacts suggests that, at worst, ten households may not be replaced, thus leaving the net growth in West Lincoln and the Region at 10 and 45 households, respectively.

3.3.2 BUS ROUTES

Of greater concern to the school boards is the safety factor on the preferred access route (Regional Road #24 and Highway #20) from the Queen Elizabeth Way to the proposed site. School buses avoid travelling along this road unless necessary, but it is

crossed frequently when collecting and dropping off students. Given the possible volume of truck traffic carrying hazardous material to the OWMC site, it is the opinion of the Boards, and particularly the Separate Board, that there may be a need to re-route present bus patterns further to reduce the number of times that the access route is crossed. Needless to say, the safety factor is of major importance, however, the cost of altering the current network will not be substantial since it may not be a case of needing more buses.

3.3.3 EDUCATION LEVIES

The proposed OWMC facility will not have an impact on the school boards' cost sharing procedures as does the Regional apportionment system. Similar to Niagara Region, the school boards distribute their costs on the basis of assessment to determine how much each municipality is levied. Unlike the Region, however, the education cost sharing procedure does not include the equivalent assessment associated with government institutions and facilities. Education levies on West Lincoln, therefore, will remain at their present levels after the OWMC facility is constructed.

3.3.4 SUMMARY

The school board considerations, while important, do not give rise to significant cost impacts from a municipal tax point of view.

As a result, further discussion has not been included in the impact analysis. Possible effects on the school boards, however, have been taken into account in the monitoring programme. In this way, should cost impacts occur they can be identified through monitoring and mitigated on an ad hoc basis by OWMC.

3.4 PROPERTY TAX IMPACT

The above text describes the changes that could occur to property assessment, expenditures, revenues, payments in lieu of taxes, and apportionment of the upper tier levy on West as a result of establishing the OWMC facility. The property taxes paid by the residents of West Lincoln represent the focal point, or ultimate net impact, of all these various impact items.

In the base impact scenario, the establishment of the OWMC industrial waste site in West Lincoln may increase property taxes by 5.6%. This represents about a \$24.80 increase on average on taxes now paid to the Township and the Region of \$442.70. This increase is quoted in 1984 dollars and would occur in addition to inflation or any changes in budgetary spending that West Lincoln or the Region may consider necessary in other areas not affected by the OWMC facility. This scenario also represents the aggregate of all impacts occurring during each construction and operation

stage of the OWMC facility. The actual staging and timing of impacts is discussed in more detail later in this chapter.

The principal reason for this tax impact is that, the increase in West Lincoln's share of the Regional levy is not offset by the Region's share of OWMC payments in lieu of taxes. (The procedure for determining upper tier shares is prescribed by the Province and is based on the relative magnitudes of upper and lower tier mill rates.) Moreover, while the Township's share of OWMC payments in lieu of taxes exceeds its own costs, the difference is not offset. This is demonstrated in Table 3-1. This table shows the average annual impact after aggregating all variables over the 25 to 30 year life of the facility.

Table 3-1

TOTAL FINANCIAL IMPACT

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Appportionment Increase	\$679,800	\$1,296,900	\$1,976,700
Less: OWMC PIL	(771,800)	(1,050,000)	(1,821,800)
	-----	-----	-----
Net Cost (Benefit)	\$ (92,000)	\$ 246,900	\$ 154,900

Although the base impact scenario excludes mitigation, a description of the effects of compensation payments is warranted because they may cause unusual results. For example, on the surface it would appear that, to eliminate the net property tax impact shown above, the OWMC could pay the Township an additional \$154,900 and keep this extra cost from falling on the tax payer. What would actually occur, however, is that:

- a) Non-tax revenues of the Township would rise.
- b) The general tax levy of the Township will reduce.
- c) The tax mill rate therefore will fall.
- d) The payments in lieu of taxes paid by the OWMC will also decrease because these are based on the now lower mill rate.

The net result of this is that the additional compensation of \$154,900 will still leave a residual to fall to the rate payer. While this residual will not be as large as in the first instance, it can potentially become increasingly difficult to eliminate all impacts without very substantial injections of funds. Because of this situation, a more comprehensive mitigation policy is developed later in this report.

The base case impact scenario also includes assumptions that will be tested in the sensitivity analysis. For example, the above scenario considers that capital expenditures will be financed in the year that they are incurred directly from the tax

levy. This assumption is made because the both the Township and Region have a no debenture, 'pay as you go' funding policy. In the absence of an OWMC compensation scenario, this assumption is significant, but becomes minor if capital costs are funded by OWMC.

3.5 STAGING AND TIMING OF IMPACTS

The above analysis presents a view of the overall financial impact that the establishment of the OWMC facility can potentially have on the municipalities involved and their constituent rate payers. The phasing of the project and the staging of expenditures provide a clearer picture of how the Township may be impacted upon.

The elements affecting the municipal finance considerations give rise to four distinct impact stages.

- Impacts occurring prior to the construction,
- Impacts occurring during construction,
- Impacts occurring with operations at a 150,000 tonne/annum capacity
- Impacts occurring with operations at a 300,000 tonne/annum capacity

Comments regarding the decommissioning of this site are provided in chapter 5 of this report.

3.5.1 IMPACTS OCCURRING PRIOR TO CONSTRUCTION

In this stage, it is assumed that all capital projects must be completed prior to the commencement of construction of the facility. This includes, but is not limited to, any required road work, all equipment acquisitions, all up front studies and especially all the extraordinary costs of hearing preparation. The significance of this assumption is that these 'big ticket' items will be necessary at a time when there will not be any payments in lieu of taxes flowing to the Township or the Region. These costs, therefore, will most likely be the subject of mitigation compensation.

In the absence of any OWMC capital compensation and assuming the Township and Region attempted to finance these expenditures entirely from the general tax levy in the same year, property taxes in West Lincoln could increase by 28%. This represents a \$125.00 increase on the 1984 average local property tax base of \$442.70. This increase, shown on Table 3-2a, is made up of the capital expenditures in West Lincoln, as well as West Lincoln's apportioned share of the Regional levy.

Table 3-2a

PHASE I FINANCIAL IMPACT

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Apportionment Increase	\$550,294	\$ 7,945	\$ 558,239
Less: OWMC PIL	0	0	0
	-----	-----	-----
Net Cost (Benefit)	\$ 550,294	\$ 7,945	\$ 558,239

3.5.2 IMPACTS DURING CONSTRUCTION

The Ministry of Revenue indicates that the payments in lieu of taxes paid by the OWMC should be handled in a manner similar to the property tax payments made by the private sector when construction periods span more than one year. During the construction period, any payments in lieu of taxes paid to the Township, and passed to the Region, will only relate to the amount of realty that has been erected at the time. Business tax will not apply until the facility is commissioned. Moreover, during this period, payments in lieu of taxes will be calculated using the mill rate category for vacant property, which correspond to the lower residential mill rates.

It is also presumed that municipal operating costs will be incurred by the Township and the Region during this period. These costs may begin in stages of the facility because the public

services that may be demanded by the in-coming households will probably arise from operational staff. Therefore, these expenses may be postponed until subsequent stages, however, for analysis purposes they are initiated here. This ensures that costs in this period are not understated.

In this phase, about \$31,400 could flow into the Township during the construction stage of the facility, even though no PIL's relating to business assessment are paid to the Township and the PIL, itself, has not yet grown to its full amount. While the Township's net tax levy may increase by \$151,000, the local share of PIL's could reach \$306,000, thus leaving an excess of \$155,600 in West Lincoln. In spite of this, the Region levy on West Lincoln could increase by \$528,000. Since the upper tier share of PIL's may only approach \$404,000, \$124,000 will have to be made up from the Township's own excess PIL. This is shown on Table 3-2b.

Table 3-2b

PHASE II FINANCIAL IMPACT

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Apportionment Increase	\$150,649	\$ 528,100	\$ 678,749
Less: OWMC PIL	(306,283)	(403,725)	(710,008)
	-----	-----	-----
Net Cost (Benefit)	\$(155,634)	\$ 124,375	\$ (31,259)

3.5.3 IMPACTS DURING OPERATIONS -- 150,000 TONNES/ANNUM

In this stage, full payments in lieu of taxes will be calculated at the commercial and industrial rate; business taxes will be paid at the 60% level; assessment values will correspond to those determined for a 150,000 tonne/annum capacity; all induced residential and commercial growth will occur and all operating costs will be incurred as described in previous chapters.

This stage, as well as those previous, are based on decreased residential property assessment to recognize a potential for reduced property values in the surrounding area because of the OWMC facility. The Phase 4B Economic Impact Study considers that these values will return to their original amounts after a settling period which may approximate five years.

This scenario is shown on Table 3-2c. While \$1.6 million in PIL's will flow from OWMC, \$543,000 will go directly to West Lincoln with \$1.0 million representing the upper tier share. After considering both the upper and lower tier levies, excess funds of \$127,000 will remain with the Township and this will result in an 8.3% decrease in the tax levy on the local rate payers. While the 1984 average residential tax totalled \$442.70, these excess funds could reduce taxes by \$37.00, leaving a net tax per unit of \$406.00.

Table 3-2c

PHASE III FINANCIAL IMPACT

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Apportionment Increase	\$179,813	\$1,275,518	\$1,455,331
Less: OWMC PIL	(542,591)	(1,039,474)	(1,582,065)
	-----	-----	-----
Net Cost (Benefit)	\$ (362,778)	\$ 236,044	\$ (126,734)

3.5.4 IMPACTS DURING OPERATIONS -- 300,000 TONNES/ANNUM

As a further option, this stage considers the possibility that the OWMC facility could be brought up to a 300,000 tonne/annum capacity. In this case, the property assessment of the facility, and therefore the payments in lieu of taxes paid by OWMC, are calculated on larger construction cost estimates. All other variables remain as presented with operations at 150,000 tonnes/annum except for property value reductions. It is expected that a return to original values would occur prior to an increase of plant capacity.

In this final stage OWMC's payments in lieu of taxes could total \$1.9 million. While only \$598,000 will offset the local levy, about \$1.3 million represents the upper tier share. In

total, the PIL's will exceed expenditures by \$166,100 and this will result in an 10% decrease in local property taxes, as shown on Table 3-2d.

Table 3-2d

PHASE IV FINANCIAL IMPACT

	<u>West Lincoln</u>	<u>Township Share of Region Levy</u>	<u>Total</u>
Net Expenditure/Apportionment Increase	\$179,813	\$1,521,206	\$1,701,019
Less: OWMC PIL	(597,774)	(1,268,991)	(1,866,765)
	-----	-----	-----
Net Cost (Benefit)	\$ (417,961)	\$ 252,215	\$ (165,746)

3.5.5 PRESENT VALUE CONSIDERATIONS

A present value analysis has not been applied to the staging and timing of impacts for two reasons. First, present value analyses are designed to be used when comparing alternative courses of action that have different streams of cash flows. Present value calculations bring the different cash flows to a common denominator so that the benefits of an option can be plainly seen. The municipal finance analysis is meant to be solely a detailed examination of possible impacts. As such, there are no alternative courses of action except for a 'no go' scenario which is represented by the 1984 base data used in the study. Secondly, present value analyses are useful when alternate courses of action

have very irregular streams of revenues or expenditures. Present value calculations can smooth financial fluctuations over time so that a clearer picture of impacts can be obtained. The impacts that may occur in West Lincoln are not expected to be irregular. With the exception of up front capital costs, annual operating expenditures and flows of funds should not experience substantial fluctuations.

The process used in a present value analysis forecasts costs and revenues as they would occur in future years. These flows are then expressed in present day dollars through the use of a discount (investment) rate. If all annual flows are exactly the same, their present value would have to be the value for the base year.

3.6 SENSITIVITY ANALYSIS

The purpose of this sensitivity analysis is to test the reliability of the conclusions. By evaluating the most likely ranges for the underlying assumptions, different levels for the net property tax impact can be obtained. By comparing these results the analysis can determine the significance of the variables as well as the overall range of possible impact values. The sensitivity tests were examined using the municipal finance computer model developed for this analysis. Table 3-3 summarizes

these results.

The most significant variable in the municipal financial analysis is the valuation of the property assessment associated with the OWMC facility. Since this is based on estimates of the cost of land and buildings, the net financial impact was tested using construction costs that vary in a range from plus or minus 20% of the values used in the base impact scenario. While the base case forecasts the OWMC PIL at \$1.8 million, this could range from \$1.5 million to \$2.1 million. Moreover, the impact on property taxes varies from 9.1% when PIL amounts are low to 2.6% when the PIL approaches \$2.1 million.

All other variables have a very minor effect on the municipal finance analysis. Table 3-3 shows that migration, property values, operating expenditures and induced commercial growth have very little effect on the final tax impact.

The only other aspects that could change the results of the base impact scenario are variations in the amount of capital expenditures and the level of business assessment paid by the OWMC. These could cause as much as a 3% variation in the residential mill rate.

Table 3-3

SENSITIVITY ANALYSIS

	OWMC P/L	Net Levy (Local & Region)	Taxable Assessment	Exempt Assessment	Residential Mill	Mill Rate Difference From Base
	(\$000's)	(\$000's)	(\$000's)	(\$000's)		%
Base Impact	1,822	2,151	16,057	17,552	117.85	5.6%
W.L. hshld =10	1,822	2,146	16,022	17,552	117.85	5.6%
W.L. hshld =30	1,822	2,155	16,092	17,552	117.84	5.6%
Region hshld =40	1,822	2,151	16,057	17,552	117.85	5.6%
Region hshld =70	1,822	2,151	16,057	17,552	117.85	5.6%
Operating Exp -20%	1,811	2,138	16,057	17,552	117.19	5.0%
Operating Exp +20%	1,832	2,163	16,057	17,552	118.50	6.2%
Capital Exp -20%	1,774	2,094	16,057	17,552	110.85	2.8%
Capital Exp +20%	1,870	2,207	16,057	17,552	116.35	6.4%
Induced Assess =0	1,818	2,107	15,765	17,552	117.59	5.4%
Induced Assess = \$450,000	1,826	2,195	16,350	17,552	114.70	5.9%
Property Val Decr 30%	1,821	2,151	16,078	17,552	117.79	5.6%
Property Val Decr 40%	1,823	2,151	16,075	17,552	117.90	5.7%
OWMC Assess -10%	1,666	2,185	16,057	12,197	115.65	7.3%
OWMC Assess -20%	1,506	2,222	16,057	10,842	117.62	9.1%
OWMC Assess +10%	1,975	2,119	16,057	14,907	112.18	4.1%
OWMC Assess +20%	2,125	2,090	16,057	16,242	117.37	2.6%
OWMC Business Assess =30%	1,526	2,217	16,057	11,011	117.37	8.9%
Capital Deantured	1,646	1,943	16,057	17,552	102.83	-4.6%

CHAPTER 4
MITIGATION AND MONITORING

4.1 INTRODUCTION

This chapter presents an approach for compensating the West Lincoln and Niagara Region for the financial impacts arising from the establishment of the proposed OWMC facility. The Municipal Financial Analysis considers all the jurisdictions that operate under the auspices of these municipalities. These agencies and departments and these are listed as follows:

Township of West Lincoln

General Government (Council, Finance, Legal,
Administrative, etc.)
Fire Protection
Roadways and Winter Control
Waterworks and Sanitary Sewerage Retail
Distribution
Solid Waste Collection
Health Services (cemeteries)
Parks and Recreation
Libraries
Planning and Development

Regional Municipality of Niagara

General Government
Police Protection
Emergency Measures
Roadways and Winter Control
Waterworks and Sanitary Sewerage Wholesale
Distribution (plants and trunks)
Public Health Services
Social and Family Services (general welfare
assistance, care for the aged, children's aid
and day care)
Planning and Development

It was beyond the parameters of the municipal finance analysis to establish an approach to mitigation for individuals, businesses, farms or groups. As such, community compensation beyond those agencies listed above is not discussed in this report.

4.2 IMPACT MANAGEMENT: MITIGATION

4.2.1 OPERATING COSTS MITIGATED BY PAYMENTS IN LIEU OF TAXES

The previous analysis chapter categorized cost impacts in terms of operational expenditures and capital expenditures. This grouping naturally lends itself to mitigation. Operating costs such as, the requirement for additional staff members, or a possible necessity to provide extra snow-plowing on Region Road #24, need not be mitigated separately since there is a substantial payment in lieu of tax being made annually that represents operating revenue. On the other hand, capital costs resulting from the OWMC

facility are not covered by normal operating revenue and could be mitigated separately. The following demonstrates this approach for both Niagara Region and West Lincoln.

4.2.1.1 Niagara Region

Annual operating expenditures for the Region of Niagara are projected to increase by \$147,500. This includes the specific cost impacts directly related to the OWMC facility as well as the costs needed to service the new households and the induced commercial growth moving into the Region and Township. To offset these costs Niagara Region's share of the payments in lieu of taxes is expected to exceed \$1.0 million each year. In addition to this the new households and businesses also will pay property taxes that will go to offset operating costs.

4.2.1.2 West Lincoln

Annual operating expenditures for West Lincoln are expected to increase by \$116,800 while revenues decrease by \$63,000. Costs that are specific to the OWMC facility include: the environmental project coordinator during the initial stages of the project; municipal involvement in OWMC related matters during operations and monitoring; additional road maintenance on Township roads; and a provision for increased liability insurance premiums. This cost increase also includes servicing the new households and the induced commercial growth. To offset this the local share of

payments in lieu of taxes paid by OWMC is forecast to total \$775,000 per year.

4.2.2 CAPITAL COSTS MITIGATED SEPARATELY

Prior to the operation of the OWMC facility, up front capital expenditures for Niagara Region are expected to total \$100,000 before the OWMC facility proceeds. This represents a provision for the site related planning requirements and a Region wide health survey. Additional capital expenditures in West Lincoln are expected to total \$200,000. This includes an allocation for fire and roads maintenance equipment, recreational facilities and additional planning requirements.

4.2.3 APPORTIONMENT OF THE REGIONAL LEVY

As described above, West Lincoln's share of the Regional levy can potentially increase by \$1.3 million while the Region's share of the payments in lieu of taxes only totals \$1.0 million. This leaves a difference of \$250,000 to fall on the West Lincoln taxpayers, and this cannot be eliminated with simple solutions. An attempt to mitigate this impact can lead to more expenses. The payments in lieu of taxes are determined using the municipality's mill rate. As shown in previous chapters, an injection of funds only serves to reduce the mill rate which, in turn reduces the original payment in lieu of tax. Since a spiraling action is created an amount of about three to five times the size of the actual impact would be necessary to eliminate the cost.

There are two approaches that could be used to overcome the deficit, but both would require the concurrence of the Ministry of Municipal Affairs, not to mention that of West Lincoln.

4.2.3.1 Regional Mill Rate

Ministry staff recognize that the apportionment procedure can create aberrations which cause inequities. An improvement that has been implemented in one region and is being considered in several others, including Niagara, is to use a Regional mill rate rather than the apportionment procedure. While the Province would probably agree to the principle, they may also require the consensus of all municipalities in the Region since the Ministry of Municipal Affairs would require a complete reassessment of all taxable property in Niagara.

4.2.3.2 Revision of the PIL Formula

The second option would be to suggest a payment in lieu of tax formula that gives more money to West Lincoln than the existing one. A revised formula would be initially based on the present calculation of PIL's for West Lincoln's own requirements. To this, an added Regional share of the PIL would be determined according to the amount of the upper tier levy that is attributed solely to the OWMC facility.

The second option is probably more feasible because it would be easier to implement and it would not affect the other municipalities in the Region.

4.2.4 OTHER CONSIDERATIONS

4.2.4.1 Building Permit Fees

The issuance of a building permit by West Lincoln will be necessary before construction of the facility begins. It is suggested, however, that the amount of building permit fees paid by the OWMC not be considered as a compensation item. It is accepted practice for municipalities in the province to set building permit fees so that only the administrative cost of carrying out building inspections be recovered. At present, it is not known how West Lincoln will carry out the required inspections. If, on the one hand, West Lincoln obtains this expertise through an outside agency then the OWMC may consider mitigating this cost. On the other hand, if the OWMC arranges the inspections and protects West Lincoln's liability with respect to building codes, there may not be any cost to the Township to mitigate. Under West Lincoln's current bylaw, the building permit fee could approach \$600,000 which, in the latter example, would represent a windfall to the Township.

4.2.4.2 Level of Service

Once mitigation discussions begin, the OWMC may receive requests for financing for capital projects not identified in the above text. These requests should be considered in light of the level of service that is being offered to the community.

As described at the beginning of this chapter, the Municipal Finance Analysis considers the financial impact on all jurisdictions operated under the auspices of the regional and local governments. This examination included personal interviews with senior officials of the operating departments. In this evaluation several functions are judged to have no capital or extraordinary costs that could be subject to mitigation. This is not to say that there may be operating cost impacts, for example, to day care services, but these can be supported by the payment in lieu of taxes as well as the property taxes paid by in-migrating OWMC related households.

Central to the method used in the impact analysis is the level of service now provided by the municipalities. To clearly isolate the effects caused by OWMC's presence in West Lincoln, the analysis considers the amount and quality of the service currently provided to the existing residents. Any improvements to the level of service in the future is not considered to be a result of OWMC's facility, but rather, a conscious decision by the community to improve its service standards.

This type of compensation, however, is not unusual in the realm of municipal finance because local councils are the focal point of community attitudes. Since it will be extremely difficult to mitigate all personal and community impacts, compensation to the municipality, beyond the mitigation programme, can demonstrate that the OWMC is prepared to operate as a responsible corporate citizen. This has been the reason for payments that have been made to host communities elsewhere in the Province that exceed the demonstrable local financial impact.

4.3 MONITORING

The Municipal Finance monitoring programme is intended to identify, isolate and quantify impacts arising from the establishment of the OWMC facility as they actually occur. It is an on-going verification of the impact analysis and also will serve to determine the effectiveness of mitigation. As impacts are observed warranted corrective action can be taken.

This monitoring programme is designed to be cost effective. It is not prudent to spend a considerable effort collecting information that may be rarely used. Therefore, the monitoring items listed below are intended to be specific enough to indicate where impacts may be occurring, but general enough so as not to

require a considerable effort to compile. Most monitoring items can be obtained using the annual financial statements and records of the municipalities.

Notwithstanding the comprehensive nature of the monitoring items, impacts may arise in the future that were not foreseen and, therefore, not monitored. This certainly does not exclude these impact items from consideration. Moreover, the data that is obtained through the programme still may assist in evaluating the cause of any unforeseen impacts.

The monitoring programme is also designed so that the municipal finance computer model can incorporate the data. In this way, the model can be periodically up-dated so that further impact forecasts can be established based on the most current information.

It is expected that the required data collection will be co-ordinated by the proposed OWMC Monitoring Committee with assistance from the staffs of the Region, Township and OWMC. Moreover, as will be shown below additional analysis may occasionally draw on the expertise of Provincial Ministries or professionals in the field. The programme should commence with the initiation of construction. It is intended that monitoring be conducted annually after the municipal financial statements are available (probably by mid to late spring). For the most part,

this annual monitoring is a straight forward exercise. However, as will be shown below, some items will occasionally require a more detailed analysis. It is suggested that these be conducted at least every four to five years to ensure that all financial activity is adequately reviewed. This is not to say that specific analyses may not be conducted sooner if necessary. Whenever an anomaly with the data is identified a more comprehensive analysis may be warranted.

The detailed analyses should also include discussions with municipal and provincial officials. The department heads of the municipalities are able to identify any difficulties with meeting service requirements. Provincial officials such as the Ministry of Municipal Affairs can comment on grant programmes or apportionment procedures. Similarly, the Ministry of Revenue and the Ministry of Education may respectively assist in providing information regarding property assessment levels or school impacts.

4.3.1 SPECIFIC MONITORING ITEMS

Property Assessment Base

Number of Households: This item compares the household growth in West Lincoln and Niagara Region to the known in-migration of OWMC employees. Any substantial deviation from that forecast may affect municipal finances. Greater numbers may cause added

servicing demands on the Township, while smaller numbers may not generate sufficient property tax receipts.

Residential Property Assessment Per Household: Average household assessment levels indicate the relative size of the tax burden on local rate payers. Moreover, average levels incorporate property being removed from the tax base; potential decreases related to property value reductions and the possible increased value of new housing construction.

Commercial Property Assessment: This item indicates the amount of induced commercial growth that may result because of the OWMC facility. Also, the relative level of business assessment will reflect the kinds of businesses locating in West Lincoln (retail assessment is charged 30% and manufacturing is charged 60%). Similar to residential assessment greater numbers may cause added servicing demands on the Township. Smaller numbers may not generate sufficient property tax receipts. Care should be taken when monitoring this item because it may not show smooth annual increments, but instead, grow at discrete intervals. As a result, this item may be more easily dealt with at in-depth monitoring intervals.

Property Assessment for the OWMC Facility: This is the single most important variable in the municipal finance analysis since PIL receipts and regional apportionment are directly affected.

Fortunately, once the facility is constructed property assessment will not change (unless re-assessments occur). If the facility should be expanded in the future, this will add to the assessment level and monitoring only need to occur at these times.

Municipal Expenditures

Capital Costs: Similar to the suggested mitigation programme, monitoring municipal expenditures can be defined in terms of capital and operating expenses. Since capital costs can be funded separately on an up-front basis, specific monitoring may not be necessary.

Operating costs: These costs can change for two reasons: a) because of the direct effect of the OWMC facility, b) because of added servicing demands due to household and commercial/industrial growth. With respect to the former, monitoring any operating costs stemming from the facility such as, personnel staffing, road maintenance, health monitoring etc., should be a straight forward issue.

Monitoring added service costs due to changes in the demographic base will require examining the costs per household for each of the municipalities' operating departments after applying household growth figures. Changes in the level of service offered by the impacted municipalities can also be derived

in this manner since this represents the deviation from the base impact analysis, after accounting for inflation.

Expenditure changes due to commercial growth cannot be handled in this manner. Instead, these costs may have to be considered on a specific development basis. In all likelihood, municipal operating costs related to the commercial sector will not substantially distort the per household costs described above. If the monitoring programme shows otherwise, it should be taken into account when isolating operating costs due to OWMC impacts.

Apportionment of the Regional Levy: Monitoring the effects of the apportionment system used to allocate the Regional levy can be very difficult. There are a number of variables that must be dealt with before a direct link can be made to isolate the effect of the OWMC facility. Some of these are: changes in market values in West Lincoln and the other municipalities in Niagara Region; assessment growth in the other municipalities as compared to West Lincoln; changes to the actual Region levy and non-OWMC growth in West Lincoln. A full apportionment analysis would be needed to arrive at a complete picture. As a result, monitoring apportionment could be done in two ways. The annual monitoring could simply record West Lincoln's apportionment share and dollar levy. If substantial deviations are observed, then a detailed analysis could be undertaken. In any event, it would be prudent to conduct such a review during in-depth monitoring intervals.

Non-Tax Operating Revenues

Payments in Lieu of Taxes: The monitoring of this item is to ensure that the operating and apportionment costs due to the OWMC facility are adequately funded. Any excess funds can then be used at the Township's discretion. Similarly, while none are anticipated, any shortfall of funds, after considering other non-tax revenue changes, can be flagged.

Provincial Grants: This item will record the changes to all Provincial grants, conditional and unconditional, that are paid to the municipalities. Although it is expected that some grants may reduce, such as, MTC road subsidies and the Resource Equalization Grant, other grants may increase because of the new households or the possible higher level of spending activity. As a result, more weight should be given to the total funding level than to individual items.

Other Revenue: Other programme and miscellaneous operating revenue sources do not play a major role for either the Township or the Region. Nevertheless, the monitoring of these items completes a review of non-tax revenues. It could happen for example, that in the future the Township may place a greater emphasis on user fees for water distribution or recreational facilities.

Net Property Taxes:

This item monitors the net impact of all the above items taken together to obtain the final effect on the rate payer. Since the mill rate is the ultimate balancing item to equate revenues and expenditures, the final test of the mitigation programme can be seen through changes to the tax levy.

It may be difficult, though, to establish guidelines for acceptable levy increases, such as the level of inflation. In several ways West Lincoln is on a threshold position in moving from a wholly agricultural community to one with a growing residential area. As a result, some department expenditures, such as fire protection, recreation and culture for example, can be expected to escalate in amounts greater than inflation as levels of service increase. Monitoring property tax changes therefore should not be done with preconceived notions of fairness. Instead, the monitoring programme should be able to fully explain tax increases using the other monitoring items listed above.

CHAPTER 5

DECOMMISSIONING IMPACTS

The purpose of this chapter is to examine the possible impacts that could affect the financial structure of the candidate municipalities when the proposed industrial and hazardous waste management facility is closed, or decommissioned.

5.1 SCENARIOS AND ASSUMPTIONS

When dealing with questions regarding decommissioning, the ability to make definite statements about underlying social or economic assumptions becomes more difficult than when discussing construction or operational phases. The principal reason for this is the length of time involved until decommissioning is implemented. To overcome this, three scenarios (high, medium and low) were used to examine the municipal finance considerations. These scenarios address the magnitude of the underlying variables such as, economic activity, demographic characteristics, property assessment and levels of expenditure. The assumptions employed in these scenarios are detailed in the following paragraphs.

5.2 PROPERTY ASSESSMENT

5.2.1 The OWMC Facility

Present Provincial policy regarding payments in lieu of taxes by crown corporations is the same as for private business. When decommissioned, business assessment, and therefore a business portion of the payment, is not applicable since the facility is no longer in operation. Payments on the remaining realty are still made and, if any demolitions occur, these payments only apply to the net amount of realty remaining. Moreover, since the premises are vacant the payments are calculated at the reduced residential mill rate rather than at the higher commercial mill rate. Of course, it is first presumed that this Provincial policy will still be in effect when the OWMC facility is decommissioned.

It is also assumed that demolitions or removals occur when the OWMC facility is decommissioned. Each of the scenarios deal with varying amounts of remaining realty. In the high scenario it is assumed that all realty remains. In the medium scenario 50% remains and in the low scenario 10% remains.

5.2.2 Other Related Commercial Activity

The commercial activity that entered the West Lincoln area because of the establishment of the OWMC facility may, or may not, remain after decommissioning. This depends largely on the level of other economic activity in the area. It is assumed in the high scenario that this induced commercial activity remains operable. In the

medium scenario it is assumed that 50% of the businesses close down. In the low scenario it is assumed that all OWMC related businesses close, thus leaving West Lincoln with the number of commercial activities that it had prior to construction.

Provincial policy for property taxation of these businesses is the same as that related for OWMC's payments in lieu of taxes previously described. When a business ceases operation, business tax stops and the remaining vacant realty is charged property taxes at the lower residential rate. It is not assumed, however, that structures are demolished. Urban commercial structures are not like industrial specialty structures such as the OWMC facility. Vacant commercial realty can remain in place for a considerable period while taxes are paid. While no revived activity is anticipated, this type of property is available for alternate use.

5.3 HOUSEHOLD ACTIVITY

In the decommissioning analysis it is assumed that houses are not demolished, regardless of the level of any possible out migration. In terms of the housing stock any net out migration only manifests in terms of larger vacancy rates. For financial considerations, this implies that the taxes on the houses are paid by the owners, even if absent.

The demand for service does, however, relate to the number of households in the area. Therefore, operating expenditures associated with the provision of service varies according to the net out migration after decommissioning. In the low scenario it is assumed that all OWMC related households leave West Lincoln (20 households) and Niagara Region (35 households) and there are no replacements. In the medium scenario it is assumed that half of the OWMC households leave the area and are not replaced. The high scenario assumes no net out migration.

5.4 MUNICIPAL EXPENDITURES

The description of scenarios as high, medium or low has thus far referred to the level of residential or business activity remaining in the area. While the financial computer model generates operating costs related to the provision of services to the residential and business sectors, additional operating expenditures are also included to reflect the specific impacts of decommissioning the OWMC facility on West Lincoln and Niagara Region. The discussion of some OWMC related expenditures, however, describes cost alternatives in terms of most expensive to least expensive. The alignment of cost options within the scenario structure places the higher cost estimates in the low growth scenario and the lower cost options in the high growth scenario. In this way boundaries for a worst to best case are established.

5.5 PROPERTY TAX IMPACT

The scenarios represent upper and lower boundaries for impacts ranging from a low growth/high expenditure possibility to a high growth/low expenditure eventuality. The resulting impacts therefore reflect a range of property tax changes in West Lincoln from increases in the worst case to reductions or savings in the best case. In the low growth/high cost scenario decommissioning the OWMC facility may increase property taxes by almost 10.0% over the 1984 base year for analysis. Property taxes could increase by 2.0% in the medium scenario and decrease by as much as 4.0% over the 1984 base in the high growth/low cost scenario. These estimates can be compared to the overall operating impact forecast in the main municipal finance study which predicts a 5.6% increase in property taxes in the absence of mitigation.

CHAPTER 6
CONCLUSIONS AND RECOMMENDATIONS

The overall impact in the base case scenario without mitigation appears large, increasing the property tax burden on the rate payers of West Lincoln by 5.6%. This comes about for two reasons.

6.1 UP FRONT COSTS

First, there are up front capital costs of \$300,000 to be incurred before the OWMC facility is put into operation. In spite of the overall impact and regardless of a mitigation programme, the payments in lieu of taxes that will be paid by OWMC will approach \$1.5 to \$2.1 million per year. Since these payments are so large, the Township will be in a net benefitting situation financially once the initial start up costs have been incurred and normal operations of the facility are underway. When the impact analysis is staged to reflect the timing of costs and revenues, it is shown that the Township will remain with an excess of PIL receipts of \$127,000. This can result in an 8.0% decrease in the tax levy on the local rate payers. There are still problems with this example, however, as will be shown below.

6.2 APPORTIONMENT OF THE REGIONAL LEVY

The impact on the Region's levy may be substantial, possibly increasing from \$997,000 to \$2.3 million per year. This comes about because Regional apportionment is based on the relative amount of assessment in each municipality and the proposed facility adds an extremely large amount of property assessment to the Township's tax base. Moreover, the annual payment in lieu of tax is still large enough in total to fund this added expense once normal operations at the plant begin. The difficulty arises, however, in the sharing of the PIL between the Region and the Township. The Regional portion of the PIL, as determined using the Provincial formula, may not be large enough to fund the entire increase in the Regional levy. As a result, paying this cost from the total PIL erodes that share that would normally accrue to the Township. In the previous example it was stated that the Township will remain with excess PIL receipts of \$127,000. This is after a portion of the Township's share of the OWMC PIL is used to pay for the increased Regional levy. If this was rectified West Lincoln would receive an excess PIL of \$363,000 per year, after all other OWMC related operating costs are paid. This is then available to use for other municipal purposes.

6.3 RECOMMENDATIONS

Given the above, the following recommendations are suggested.

6.3.1 Payments in Lieu of Taxes

It is suggested that OWMC make full payments in lieu of taxes to West Lincoln and Niagara Region. Moreover, not all cost impacts need be compensated for separately. Some represent costs that would normally be paid for out of the municipalities' standard tax receipts and general levy. Therefore, the substantial payments in lieu of taxes will automatically defray operating costs specifically related to OWMC.

6.3.2 Capital Costs Mitigated Separately

Up front capital expenditures resulting from the requirements of the OWMC facility can be mitigated separately. Capital expenditures in West Lincoln are expected to total \$200,000 before the OWMC facility proceeds. This includes fire and roads maintenance equipment, the new household requirements for recreational and cultural facilities and additional planning requirements. Up front expenditures resulting from the presence of the OWMC plant for Niagara Region are expected to total \$100,000. This represents site related planning requirements and a portion of a proposed Region wide health survey.

6.3.3 Building Permit Fees

The issuance of a building permit by West Lincoln will be necessary before construction of the facility begins. At present, it is not known how West Lincoln will carry out the required inspections. If, on the one hand, West Lincoln obtains this expertise through an outside agency then OWMC may consider mitigating this cost. On the other hand, if OWMC arranges the inspections and protects West Lincoln's liability with respect to building codes, there may not be any cost to the Township to mitigate. Under West Lincoln's current bylaw, the building permit fee could approach \$600,000, which in the latter example, would represent a wind fall to the Township.

6.3.4 Apportionment of the Regional Levy

To allow for a large enough Regional share of the PIL to fully fund the impact of apportionment on West Lincoln it is suggested that the Provincial method for determining the payment in lieu of tax be revised. This revision would be based on the current derivation of PIL's for West Lincoln's own purposes. In addition to this, the Regional PIL would be determined according to the amount of the upper tier levy that is attributed solely to the OWMC facility.

While two options are presented in the text, this option is being recommended because it is less disruptive to the other municipalities in the Region and it places funds directly with West Lincoln.

6.3.5 OWMC Payments

Given the above recommendations for payments in lieu of taxes and mitigation, the following summarizes the payments that could potentially be made by OWMC.

OWMC Payments	
Mitigation -- Paid Once	
West Lincoln	\$200,000
Niagara region	100,000
	\$300,000
Building Permits	\$600,000
Total Up Front	\$900,000
Payments In Lieu of Tax	
Paid Annually	
West Lincoln	\$ 775,000
Niagara Region	1,050,000
Revised Formula	250,000
Total Annual	\$2,075,000

6.3.6 Monitoring

It is also recommended that a monitoring programme be established. This programme will assist in identifying and quantifying any demonstrable financial impacts on West Lincoln and Niagara Region

as they occur. In this way, the effectiveness of the mitigation measures can be addressed and the appropriate action taken. The monitoring programme should be conducted in co-operation with the Township and the Region. Monitoring should be conducted annually and begin with the construction of the facility. Periodically, the monitoring programme should also include discussions with municipal officials, provincial ministries and school boards. A complete list of the data to be monitored, level of detail and frequency was presented in Chapter 4 of this report.

APPENDIX A

THE MUNICIPAL FINANCE COMPUTER IMPACT MODEL



MUNICIPAL FINANCE COMPUTER IMPACT MODEL

The Municipal Finance computer Impact Model consists of six components for both West Lincoln and Niagara Region:

1. Population and Assessment
2. Operating Expenditure
3. Capital Expenditure and Financing
4. Non-Tax Revenue
5. Apportionment of the Regional Levy
6. Mill Rate Summary
(including the derivation of the OWMC PILs)

The first component establishes the demographic and tax base parameters that underlie the scenarios being tested. This includes: the property assessment of the OWMC facility; the new household growth related to OWMC and its assessment; induced commercial assessment; replaced agricultural assessment on the site and a provision for decreased assessment resulting from possible property value reductions.

The remaining components simulate the financial operations of the Township and Region using the base financial statement and budget information. This is summarized both before and after the OWMC facility would be constructed. In this, expenditures related to the waste management site as well as revenue changes are forecasted. West Lincoln's share of the Regional levy is also determined using the Province's current apportionment procedure that is based on property assessment, market values and transfer payments. In the mill rate summary, the amount of payments in lieu of taxes paid by OWMC as well as the ultimate tax impact on the residents of West Lincoln are determined.

OWMC MUNICIPAL FINANCE MODEL

Model Assumptions

Run:	Base Impact	Without Mitigation
1a. New households in West Lincoln		20
1b. New households in Niagara Region		55
2a. Replaced Assessment		(23,000)
2b. Lost property value (assessment)		(25,000)
2. Total Reduced Assessment		(48,000)
3. Induced Comm/Ind Assessment		225,000
4. OWMC Assessment		8,470,000
5. % Business Assessment		60
6. OWMC Contribution--Region		0
7. OWMC Contribution--West Lincoln		0
8. W.L. Operating Expenditures		as generated
9. W.L. Capital Expenditures		as generated
10. Region Operating Expenditures		as generated
11. Region Capital Expenditures		as generated
12. Capital Financing		from current

MUNICIPAL FINANCE MODEL

TOWNSHIP OF WEST LINCOLN

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Population & Assessment							
Population	9,442						
Housing Units	2,994		20	20	20	20	20
Residential Assessment Per Unit (Note A)	4,100	4,100	4,100	4,100	4,100	4,100	4,100
Current Res. Assess.	14,549,230						
New Resid'l Assessment		0	0	82,127	82,127	82,127	82,127
Reduced Assessment		(48,000)	(48,000)	(48,000)	(23,000)	(23,000)	(48,000)
Total Residential/Farm Assessment	14,549,230	(48,000)	(48,000)	34,127	59,127	59,127	34,127
Accumulated	-	14,501,230	14,501,230	14,583,357	14,606,357	14,606,357	14,583,357
Weighted Residential/Farm Assessment	12,360,840	(48,000)	(48,000)	29,068	50,250	50,250	29,068
Commercial/Industrial Assessment	2,432,070			225,000	225,000	225,000	225,000
Business Assessment	938,675			87,500	87,500	87,500	87,500
Local Taxable Assessment	15,735,591	(48,000)	(48,000)	321,508	342,750	342,750	321,508
OWMC Assessment							
Industrial		0	5,649,490	8,470,000	8,470,000	10,200,330	8,470,000
business	60%	0	0	5,082,000	5,082,000	6,123,810	5,082,000
Total OWMC	0	0	5,649,490	13,552,000	13,552,000	16,324,140	13,552,000
Total Weighted Assessment	15,735,591	(48,000)	5,606,090	13,873,508	13,844,750	16,972,910	13,873,508
Total Assessment	17,917,975	(48,000)	5,601,490	13,878,627	13,903,027	16,981,707	13,878,627
% Residential	76.6%	100.0%	-0.7%	0.2%	0.4%	0.3%	0.2%
% Comm'l/Ind'l	21.4%	0.0%	100.7%	99.8%	99.6%	99.7%	99.8%
% Increase		-0.3%	31.3%	77.5%	77.0%	93.1%	77.5%

Note A: Regional Average

MUNICIPAL FINANCE MODEL

TOWNSHIP OF WEST LINCOLN

		1984 Actual	OWMC Impact					
			Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
<u>Operating Expenditures</u>								
General Government	hcc	280,152	55,000	56,471	61,676	61,676	61,676	61,676
Protection to Persons and Property	hc	121,639	0	639	2,900	2,900	2,900	2,900
Transportation Services	hcc	1,435,736	0	17,536	44,226	44,226	44,226	44,226
Environmental Services	hc	244,645	0	1,284	5,832	5,832	5,832	5,832
Health Services	h	7,870	0	52	52	52	52	52
Social Services								
Recreation and Cultural Services	h	197,119	0	1,317	1,317	1,317	1,317	1,317
Planning and Development	hc	32,376	0	170	772	772	772	772
Total		2,319,537	55,000	77,470	116,777	116,777	116,777	116,777
=====								
<u>Capital Expenditures</u>								
General Government		19,746	300,000					300,000
Protection to Persons and Property		20,692	100,000					100,000
Transportation Services		273,566						0
Environmental Services		20,100						0
Health Services								
Social Services								
Recreation and Cultural Services		25,491	50,000					50,000
Other		21,156						0
Planning and Development		30,477	50,000					50,000
Total		411,424	500,000	0	0	0	0	500,000
=====								

MUNICIPAL FINANCE MODEL

TOWNSHIP OF WEST LINCOLN

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Capital Financing							
Capital from Current	60,633	500,000					500,000
Contributions from Reserves							
a Reserve Funds	219,291						
Grants and Subsidies							
Roads	88,000						0
Other Contributions	22,150						0
Subtotal	390,274	500,000	0	0	0	0	500,000
Debentures	24,000	0	0	0	0	0	0
Subtotal	414,274	500,000	0	0	0	0	500,000
Less							
Debentures on Behalf of Others	24,000						
Transfers to Reserves							
Net Financing	390,274	500,000	0	0	0	0	500,000
Unfinanced Capital Outlay	21,150	0	0	0	0	0	0
Existing Debt Charges	67,200						
New Debt Charges (5yr, 11%)		0	0	0	0	0	0
Total Debt Charges	67,200	0	0	0	0	0	0
Reserves and Reserve Funds							
Opening Balance	686,469						
Plus:							
Contributions from Revenue Fund	370,175						
Contributions from Capital Fund							
Other Contributions	28,667						
Less:							
Transferred to Capital Fund	219,291	0	0	0	0	0	0
Transferred to Revenue Fund Other Transfers	42,972						
Closing Balance	825,088	0	0	0	0	0	0

MUNICIPAL FINANCE MODEL

TOWNSHIP OF WEST LINCOLN

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Non-Tax Revenues							
Non-OWMC PILS	23,752						
Water and Sewer Billings	61,906	0	413	413	413	413	413
Unconditional Grants							
Per Household General							
Per Household Police							
Density	41,594	0	280	280	280	280	280
special Assistance	10,000						
Resource Equalization	6,233		(6,233)	(6,233)	(6,233)	(6,233)	(6,233)
General Support	77,547	42,735	12,317	14,562	14,562	14,562	93,411
Revenue Guarantee	177,662	(42,735)	(4,364)	(6,629)	(6,629)	(6,629)	(45,458)
Conditional Grants							
Transportation	661,204	0	(62,269)	(76,824)	(76,824)	(76,824)	(76,824)
Social Service							
Recreation	42,115	0	277	277	277	277	277
Other	4,070						
Program Revenue	264,637	0	1,772	3,107	3,107	3,107	3,107
OWMC Operating							
Other Revenue	198,454	4,706	6,628	9,991	9,991	9,991	9,991
Total Non-Tax Revenue	1,791,374	4,706	(73,179)	(63,037)	(63,037)	(63,037)	(63,037)

REGIONAL MUNICIPALITY OF NIAGARA

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Population & Assessment							
Population	573,010						
Housing Units	140,099		55	55	55	55	55
Residential Assessment Per Unit (Note A)	000's 40	40	40	40	40	40	40
Current Res. Assess.	000's 5,512,100						
New Resid'l Assessment	000's 0	0	0	2,145	2,145	2,145	2,145
Reduced Assessment	000's	(400)	(400)	(400)	(220)	(220)	(1400)
Total Residential/Farm Assessment	000's 5,512,100	(400)	(400)	1,735	1,974	1,974	1,735
Accumulated	000's -	5,511,640	5,511,640	5,513,635	5,514,075	5,514,075	5,513,635
Weighted Residential/Farm Assessment	000's 4,885,285	(391)	(391)	1,475	1,678	1,678	1,475
Commercial/Industrial Assessment	000's 3,387,195			2,803	2,803	2,803	2,803
Local Taxable Assessment	000's 8,072,480	(391)	(391)	4,277	4,481	4,481	4,277
OWMC Assessment							
Industrial	000's 0	0	54,129	61,154	61,154	61,154	61,154
Business	000's 0	0	0	48,692	48,692	48,692	48,692
Total OWMC	000's 0	0	54,129	129,846	129,846	129,846	129,846
Total Weighted Assessment	000's 6,072,480	(391)	53,739	134,123	134,327	134,327	134,123
Total Assessment	000's 8,699,245	(400)	53,670	134,383	134,623	134,623	134,383
% Residential	58.3%	100.0%	-0.7%	1.1%	1.2%	1.2%	1.1%
% Comm'l/Ind'l	42.0%	0.0%	100.7%	98.9%	98.8%	98.8%	98.9%

% increase

Note: Regional assessment figures are
equalized.

REGIONAL MUNICIPALITY OF NIAGARA

1984 Actual		OWNC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
<u>Operating Expenditures</u>							
General Government	hco	9,399,404	30,000	32,142	35,405	35,405	35,405
Protection to Persons and Property	hc	10,249,001	0	0,984	17,024	17,024	17,024
Transportation Services	hco	9,784,400	0	12,229	15,020	15,020	15,020
Environmental Services	hc	11,490,227	0	2,019	0,011	0,011	6,011
Health Services	hco	4,494,445	50,000	51,024	52,504	52,504	52,504
Social Services	h	42,227,405	0	10,570	10,570	10,570	10,570
Recreation and Cultural Services		0					
Planning and Development	hc	1,500,020	0	344	000	000	000
Total		109,501,220	80,000	121,920	145,290	145,290	145,290

Capital expenditures

General Government		452,405	300,000				300,000
Protection to Persons and Property		2,430,000					0
Transportation Services		6,335,020					0
Environmental Services		9,633,140					0
Health Services		0,093	50,000				50,000
Social Services		752,170					0
Recreation and Cultural Services							
Other		0					0
Planning and Development		11,700	50,000				50,000
Total		19,029,490	350,000	50,000	0	0	400,000

REGIONAL MUNICIPALITY OF NIAGARA

	1984 Actual	OMMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Capital Financing							
Capital from Current	2,584,148	350,000	50,000				400,000
Contributions from Reserves							
o Reserve Funds	3,992,716						
Grants and Subsidies	7,518,402	0	0	0	0	0	0
Roads		0	0	0	0	0	0
Other Contributions	84,915	0	0	0	0	0	0
Subtotal	14,180,181	350,000	50,000	0	0	0	400,000
Debentures	11,008,467	0	0	0	0	0	0
Subtotal	25,188,648	350,000	50,000	0	0	0	400,000
Less							
Debentures on Behalf of Others	3,951,200						
Transfers to Reserves	375,309						
Net Financing	20,862,139	350,000	50,000	0	0	0	400,000
Unfinanced Capital Outlay	(1,232,643)	0	0	0	0	0	0
Existing Debt Charges	18,130,400						
New Debt Charges(5yr.11%)		0	0	0	0	0	0
Total Debt Charges	18,130,400	0	0	0	0	0	0
Reserves and Reserve Funds							
Opening Balance	12,001,935						
Plus:							
Contributions from Revenue Fund	6,114,891						
Contributions from Capital Fund	340,075						
Other Contributions	938,194						
Less:							
Transferred to Capital Fund	3,992,716	0	0	0	0	0	0
Transferred to Revenue Fund	456,052						
Other Transfers	0						
Closing Balance	14,944,300	0	0	0	0	0	0

REGIONAL MUNICIPALITY OF NIAGARA

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Non-Tax Revenues							
Non-OWMC PILS	0	0	0	0	0	0	0
Water and Sewer Billings	26,386,470	0	10,359	10,359	10,359	10,359	10,359
Unconditional Grants							
Per Household General	4,166,950	0	1,650	1,650	1,650	1,650	1,650
Per Household Police	6,531,355	0	2,750	2,750	2,750	2,750	2,750
Density							
Special Assistance	612,000						
Resource Equalization	4,430,166		(8,233)	(8,233)	(8,233)	(8,233)	(8,233)
General Support	4,115,676	(38)	(38)	417	437	437	417
Revenue Guarantee	191,016	38	3,871	3,416	3,396	3,396	3,416
Conditional Grants							
Transportation	5,573,572	0	6,971	6,907	6,907	6,907	6,907
Social Service	27,636,126	0	10,850	10,850	10,850	10,850	10,850
Recreation							
Other	3,560,134	0	0	0	0	0	0
Program Revenue	9,092,303	6,640	10,119	12,060	12,060	12,060	12,060
OWMC Operating							
Other Revenue	1,616,021	1,184	1,604	2,150	2,150	2,150	2,150
Total Non-Tax Revenue	93,915,795	7,824	40,103	44,326	44,326	44,326	44,326

REGIONAL MUNICIPALITY OF NIAGARA

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes	Phase 4 150k + prop val	Phase 5 300k tonnes	Total Impact
Summary							
Operating Expenditures	109,561,228	60,000	121,920	145,296	145,296	145,296	145,296
Capital from Current	2,564,148	350,000	50,000	0	0	0	400,000
Debt Service Payments	18,130,400	0	0	0	0	0	0
Contribution to Reserves	6,112,691	0	0	0	0	0	0
Total Expenditures	136,388,667	430,000	171,920	145,296	145,296	145,296	545,296
Non-Tax Revenues (excl GSG)	93,915,795	7,824	40,103	44,326	44,326	44,326	44,326
Transfers from Reserves	456,082	0	0	0	0	0	0
Supplementary Tax, Sell) Payments, Spec'l Area Rates) and Adjustments)	(146,999)						
Total Revenue	94,222,878	7,824	40,103	44,326	44,326	44,326	44,326
General Levy	42,165,769	422,176	131,817	100,971	100,971	100,971	500,971
Accumulated	-	42,587,965	42,297,606	42,266,760	42,266,760	42,266,760	42,666,760

OWMC MUNICIPAL FINANCE MODEL

1984 Regional Apportionment
WITHOUT OWMC

Region Levy 42,165,789
Discount Factor 0.4464

(1000)	Res/Farm	Res Grants in Lieu	Total Res/Farm	Discounted Res/Farm
West Lincoln	14,546.7	0.0	14,546.7	6,493.6
Rest of Region	560,751.2	7,981.3	568,732.5	253,862.2
Total	575,297.9	7,981.3	583,279.2	260,355.8

	Com/Ind	Com/Ind Grants in Lieu	Equivalent	Total Com/Ind	Total Assessment
West Lincoln	3,368.7	97.7	341.7	3,808.1	10,301.7
Rest of Region	303,298.6	26,044.1	24,176.8	353,521.5	607,403.7
Total	306,667.3	26,141.8	24,520.5	357,329.6	617,705.4

	3 Yr Avg Equalization Factor	Discounted Equalized Equiv	Percent Responsi- bility	Levy
West Lincoln	7.36	139,970.9	2.365	997,208
Rest of Region	10.51	5,776,535.3	97.635	41,168,581
Total		5,916,506.2	100.000	42,165,789

	Total	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
LEVY WITH OWMC	2,294,146	1,005,153	1,525,308	2,271,773	2,272,726	2,518,414
LEVY WITHOUT OWMC	997,208	997,208	997,208	997,208	997,208	997,208
OWMC IMPACT	1,296,938	7,945	528,100	1,274,565	1,275,518	1,521,206

OWMC MUNICIPAL FINANCE MODEL

1984 Regional Apportionment WITH OWMC

Operable Phase	Assess in Rest of Reg'n	Res'l Assess Related To OWMC	Commercial Related To OWMC	OWMC Assessmnt	Region Levy	Discount Factor
1	560,980.7	34.1	292.5	13,552.0	\$42,266.760	
Phase						
1	560,751.6	(48.0)	0.0	0.0	42,587,965	0.4464
2	560,751.6	(48.0)	0.0	5,649.5	42,297,606	
3	560,980.7	34.1	292.5	13,552.0	42,266,760	
4	561,005.7	59.1	292.5	13,552.0	42,266,760	
5	561,005.7	59.1	292.5	16,330.2	42,266,760	

	Res/Farm	Res Grants in Lieu	Total Res/Farm	Discounted Res/Farm
West Lincoln	14,546.7	0.0	14,546.7	6,493.6
Due to OWMC	34.1	0.0	34.1	15.2
Rest of Region	560,980.7	7,961.3	568,962.0	253,984.6
Total	575,561.5	7,961.3	583,542.8	260,493.5

	Com/Ind	Com/Ind Grants in Lieu	Equivalent	Total Com/Ind	Total Assessment
West Lincoln	3,368.7	97.7	341.7	3,608.1	10,301.7
Due to OWMC	292.5	0.0	13,552.0	13,844.5	13,859.7
Rest of Region	303,298.6	26,344.1	24,178.8	353,521.5	607,566.1
Total	306,959.8	26,441.8	38,072.5	371,174.1	631,667.6

	3 Yr Avg Equalization Factor	Discontd Equalized Equiv	Percent Responsi- bility	Levy
West Lincoln	7.36	139,970.9	2.292	968,616
Due to OWMC	7.36	186,313.5	3.063	1,303,133
Rest of Region	10.51	5,779,509.9	94.625	39,994,988
Total		6,107,794.3	100.000	42,266,760

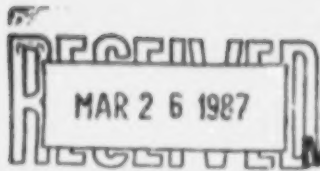
TOWNSHIP OF WEST LINCOLN

	1984 Actual	OWMC Impact					
		Phase 1 prior to constr'n	Phase 2 during constr'n	Phase 3 150k tonnes +	Phase 4 150k prop val	Phase 5 300k tonnes	Total Impact
Local Mill Rate Summary							
Operating Expenditures	2,319,537	55,000	77,470	116,777	116,777	116,777	116,777
Capital from Current	60,833	500,000	0	0	0	0	500,000
Debtenture Payments	87,200	0	0	0	0	0	0
Contribution to Reserves	370,175	0	0	0	0	0	0
Total Expenditures	2,837,745	555,000	77,470	116,777	116,777	116,777	616,777
Non-Tax Revenues	1,791,374	4,706	(73,179)	(63,037)	(63,037)	(63,037)	(63,037)
Transfers from Reserves	0	0	0	0	0	0	0
Supplementary Tax, Bell) Payments, Spec'l Area Rates) and Adjustments)	47,807	0	0	0	0	0	0
Total Revenue	1,839,181	4,706	(73,179)	(63,037)	(63,037)	(63,037)	(63,037)
Local Tax Levy	998,564	550,294	150,649	179,813	179,813	179,813	679,813
Local OWMC PIL	0	0	(306,283)	(542,980)	(542,591)	(597,774)	(771,829)
Net Local Levy	998,564	550,294	(155,634)	(363,167)	(362,777)	(417,961)	(92,015)
Region Levy	997,208	7,945	528,100	1,274,565	1,275,518	1,521,206	1,296,938
Region OWMC PIL	0	0	(403,725)	(1,039,784)	(1,039,474)	(1,268,991)	(1,050,024)
Net Region Levy	997,208	7,945	124,375	234,781	236,044	252,215	246,914
Total Levy-Region & Tnshp	1,995,772	558,239	(31,259)	(128,366)	(126,734)	(165,746)	154,898
Local Taxable Assessment	15,735,591	(40,800)	(40,800)	321,508	342,758	342,758	321,508
Exempt Assessment-OWMC	0	0	5,649,490	13,552,000	13,552,000	16,330,160	13,552,000
Total OWMC PIL	0	0	710,008	1,582,764	1,582,065	1,866,765	1,821,853
Residential Mill Rate							
West Lincoln	53.94	63.88	45.65	33.64	33.61	30.69	47.99
Niagara Region	53.87	54.44	60.74	65.22	65.20	66.05	65.86
Total Municipal	107.81	138.32	106.39	98.85	98.81	96.75	113.85
Residential Tax Per Average Unit							
West Lincoln	221.50	344.46	187.46	138.12	138.02	126.04	197.06
Niagara Region	221.20	223.54	249.43	267.80	267.72	271.23	270.44
Total Municipal	442.70	567.99	436.89	405.92	405.75	397.28	467.50
\$ Increase	-	125.30	(5.80)	(36.77)	(36.95)	(45.42)	24.81
% Increase	-	28.3%	-1.3%	-6.3%	-8.3%	-10.3%	5.6%

APPENDIX B

CAPITAL COST ESTIMATES OF THE FACILITY





MONENCO LIMITED

ONE ST. PAUL STREET, ST. CATHARINES, ONTARIO

CORRESPONDENCE

P.O. Box 1540, St. Catharines, Ontario L2N 1J9

Tel: (416) 688 9261

Telex: (81) 5210

Cables: Monenco

25 March 1987

Letter No. 951

File No. 1.3.2/3.2.2

Ontario Waste Management Corporation
2 Bloor Street West
11th Floor
Toronto, Ontario
M4W 3E2

Attention: Mr. R. V. Griffiths
Project Manager

Gentlemen:

OWMC Treatment Facility
Monenco Contract No.: MNC 8084-2

Update of Capital Cost Estimate
for Site LF-9C

As requested by OWMC, attached is the summary sheet for the revised cost estimate for Site LF-9C. This summary indicates the original estimate developed by Monenco in December 1985 (Monenco letter no. 530) and the updated cost estimate for the 150 000 t/a Partial Solidification - Without Rail Scenario. In revising the figures, the methodology used was similar to the original estimate; however, the following should be noted:

- 1) As per the original estimate, the revised estimate is in second quarter 1984 dollars and does not include escalation.
- 2) The revised estimate includes all equipment indicated on latest P&IDs and equipment lists.
- 3) Where possible, revised equipment estimates are based on suppliers' budget quotations.
- 4) Building costs have been updated based on current sizes as indicated on latest layout drawings.
- 5) As per the original estimate, the bulk material and installation labour has been factored on the basis of the mechanical equipment. The same factors have been used. Also, the same unit cost per unit of area were used for estimates of buildings.
- 6) As per the original estimate, the engineering and construction management costs of 15% of the Total Field Cost and a contingency of 20% have been included in the revised estimate.



Mr. R. V. Griffiths

- 2 -

25 March 1987

- 7) The revised estimate includes:
- supply of natural gas to the site
 - storm water sewer to Welland River.
- 8) The estimate does not include the cost of a berm (or partial berm) around the site. The additional cost for a berm is defined in Monenco letter no. 927 (9 February 1987).

If you have any questions regarding the estimate provided on the summary sheet or the information in this letter, please do not hesitate to contact us. The detailed back-up sheets are available in Monenco's office for review.

The updated operating area information for tax assessment purposes will be forwarded next week.

Yours very truly,

J. V. Fitzgerald
Project Manager

137
WG/jj
Encl.

cc: Mr. E. H. Schmidt, OWMC
Mr. G. Boot
Mr. K. Dobson
Mr. R. Kellond
Mr. T. Timbers

ONTARIO WASTE MANAGEMENT CORPORATION
TREATMENT FACILITY
150 000 t/a PARTIAL SOLIDIFICATION - WITHOUT RAIL
SITE LF-9C
25 MARCH 1987

DESCRIPTION	ORIGINAL (PHASE 4A) (1984 \$ X 1000)	REVISED
INCINERATOR	37108	38694
PHYSICAL/CHEMICAL TREATMENT	28120	40089
SOLIDIFICATION	7403	11525
ENGINEERED LANDFILL	5008	5060
ON-SITE FACILITIES	52329	58458
ON-SITE FACILITIES (SITE SPEC)		
- Fuel Oil Storage	160	222
- Water Treatment	927	1116
- Sewage Treatment	121	121
- Earthquake Allow. inc. Piling	7001	7001
- Site Grading	0	0
- Archeological Mitigation	28	28
- Material Handling Sol'd Prod.	0	1204
- LF-9C Layout	2976	(Incl. in On-Site Fac.)
TOTAL ON-SITE FACILITIES	11650	10310
OFF-SITE FACILITIES		
- Water	359	359
- Natural Gas	0	1322
- Hydro	138	138
- Telephone	124	124
- Sanitary Sewer	0	0
- Storm Sewer	0	980
- Drainage Improvements	1604	0
- Road Improvements	146	146
- Road Right of Ways	0	0
TOTAL OFF-SITE FACILITIES	2371	3069
TOTAL	143989	167205

TABLE C-4 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES
150 000 L/a CAPACITY

Page 1 of 9

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	\$/m ²	ESTIMATED COST	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
1.	Administration Building First Floor: o Showers, washroom and locker area o Lunch Room o Central Monitoring Room o Computer Room o Laboratories o Control Lab o Truckers Amenities o Conference Rooms o General Offices o Foyer/Reception Area o Storage and Delivery Area Second Floor: o General Offices o Conference Rooms o Storage Rooms o Washrooms o Lunch Room	33 x 85 x 2.7H 33 x 85 x 3.9H	2805	"Forewall" and metal siding on a concrete structure i.e. frame, pillars, roof and floor form concrete structure.	\$ 1453.42	\$ 4,076,843	Heating provided indirectly from incinerator and air conditioning from steam operated absorption chillers (C). Process Ventilation (E) and General Ventilation (F) provided.	External hydrants provided. Central monitoring facilities and computer room to be protected by a fixed Halon system. Amenities areas to be protected by sprinkler systems. Associated offices, conference room etc. to be protected by standpipe and hose system. Laboratories to be protected with portable Halon and standpipe and hose system.
2.	Maintenance Building o Washrooms o Offices o Stores o Garage	25 x 55 x 5.5H	1375	Walls and roof constructed of insulated panels.	\$ 760.53	\$ 1,045,731	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A) Heating and Cooling for offices provided by Water to Air System, Direct Discharge (D). General Ventilation (F) provided. Heating and Cooling for offices provided by Water to Air System. Direct Discharge (D).	External hydrant plus sprinkler system.

9 Apr 87

Page 2 of 9

TABLE C-8 OPERATING AREA INFORMATION FOR TAE ASSESSMENT PURPOSES
150 000 t/a CAPACITY

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	\$/m ²	ESTIMATED COST	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
3.	Gatehouse and Weighscales o Building o Weighscales o Washrooms	5 x 18 x 3m	90	Walls and roof constructed of insulated panels.	\$ 480.00	\$ 21,600 \$ 195,060	Heating and air-conditioning provided by electric heating and packaged air-conditioning units.	External hydrants
							General Ventilation (F) provided.	
4.	Solidification Plant o Building o Bunker o Overhead Cranes (2) (1 tonne capacity)	87 x 50 x 28m First Floor Second Floor Third Floor	3026 TOTAL 2120 752 752	Walls and roof constructed of insulated panels.	\$ 913.55	\$ 3,310,705 \$ 42,100 \$ 630,000	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A) and Energy Recovery from Process Extract System (B). Process Ventilation (E) and General Ventilation (F) provided.	External hydrant plus standpipe and hose cabinets.
5.	Physical/Chemical Treatment Plant o Control Room o Equipment Room o Laboratory o Offices o Washrooms	75 x 68 x 28m First Floor Mezzanine Second Floor	11200 TOTAL 6400 2760 6000	Walls and roof constructed of insulated panels.	\$ 1095.95	\$ 12,279,640	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A) and Energy Recovery from Process Extract System (B). Process Ventilation (E) and General Ventilation (F) provided. Heating and cooling for offices and control room provided by Water to Air System, Direct Discharge (D)	External hydrants and sprinkler system for majority of Building. Fixed Halon System to be provided for Control Centre. Laboratories to be protected with portable Halon and standpipe and hose systems. A physical separation/fire barrier shall be provided between areas treating organic wastes and remaining sections of the Phys/Chem Treatment Plant.

TABLE C-8 OPERATING AREA INFORMATION FOR TAIL ASSESSMENT PURPOSES
150 000 L/a CAPACITY

BLK#	DESCRIPTION OF BUILDING AND STRUCTURE	SIZE (m)	AREA (m ²)	CONSTRUCTION	g/m ²	ESTIMATED COST	DESCRIPTION OF HAZ. SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
6.	Physical/Chemical Storage Tanks Area o Building o Storage Tanks	40 x 70 x 120	3150	Walls and roof constructed of insulated panels.	3 911.55	\$ 2,677,671	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A).	External hydrants plus sprinkler system for areas storing inorganic wastes.
			Volume (m ³)			\$ 5,616,356	General Ventilation (F) provided.	External hydrants plus foam deluge system for areas storing organic containing wastes.
		3.5 Dia. x 8.20	43.5	FSP Material				
		2.0 Dia. x 3.50	10.0	FSP Material				
		2.5 Dia. x 8.20	20.0	FSP Material				
		1.5 Dia. x 2.50	8.0					
7.	Inorganic Drum Storage & Handling Building	58 x 37 x 80	Area 1990	Walls and roof constructed of insulated panels.	3 763.77	\$ 3,506,013	Heating provided by Air (Heat Recovery from Incinerator) System (A) and Energy Recovery from Process Extract System (B).	External hydrants plus sprinklers.
			Volume (m ³)				Heating and cooling for offices and Control Room provided by Water to Air System, Direct Discharge (B), Process Ventilation (E) and General Ventilation (F) provided.	Operation Room in Inorganic Processing Area shall be protected by a portable Halon system. Basic sprinkler system for each storage employee.
8.	Inorganic Tank Truck Unloading Area o Building o Concrete Basement o Storage Tanks	20 x 58 x 8	1080	Walls and roof constructed of insulated panels.	3 760.53	\$ 821,360	Process Ventilation (F) provided.	External hydrants plus water deluge spray system.
			Volume (m ³)			\$ 178,920		
						\$ 817,236		
9.	Incineration Plant o Enclosed Portion* o Bunkers o Waste Heat Boilers o Flue Gas Treatment o Overhead Crane (6 tonne capacity)	48 x 32 x 23H First Floor Second Floor Third Floor	Area 3310 TOTAL 1490 906 906	Walls and roof constructed of insulated panels.	\$ 1095.95	\$ 3,627,595	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A). General Ventilation (F) provided.	Standpipe and hose cabinets to be located in the incinerator, auxiliary boiler and feedwater treatment areas.
						\$ 208,230		
						\$ 345,000		

TABLE C.1 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES
150 000 L/S CAPACITY

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	\$/m ²	ESTIMATED COST	DETAILED NOTES (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
9.	Incineration Plant (cont'd)							
	o Precipitator	6x9.5x11.8M (5.5M structural steel)	N/A	Precipitator construction to be of rigid frame/ electrode type and will consist of 3 fields.		\$ 2,968,000	Heating and cooling for offices and control room provided by Water to Air System, Direct Discharge (D).	Fixed Halon System provided for Control Centre. Local water deluge system to be provided to each of feed chute and bunker. External hydrants.
	o Scrubber	2.1 Dia x 19M	N/A			Included in price of precipitator		
	o Offices*							
	o Control Room*							
	o Washrooms*							
	* Included in incinerator building cost.							
	Auxiliary Boiler and Feedwater Treatment	15 x 35 x 16M First Floor Second Floor	1050 TOTAL 525 525	Wall and roof constructed of insulated panels	\$ 913.55	\$ 959,228	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A). General Ventilation (F) provided.	Standpipe and hose pipe to be located in this area.
10.	Organic Drum Storage & Handling Building	50 x 77 x 7M	3850	Walls and roof constructed of insulated panels.	\$ 763.77	\$ 2,940,515	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A) and Energy Recovery from Process Extract System (E). Heating and cooling for offices and control room provided by Water to Air System, Direct Discharge (D), Process Ventilation (E) and General Ventilation (F) provided.	External hydrant plus foam deluge water spray for areas storing organic waste Building construction to include explosion venting panels. Operating room in organic processing area shall be protected by a portable Halon system. Halon sprinkler system (if rack storage employed).

TABLE C.4 OPERATING AREA INFORMATION FOR TAI ASSESSMENT PURPOSES
 150 000 L/A CAPACITY

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	ESTIMATED COST	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
11.	Incinerator Tank Farm o Storage Tanks						External monitor hydrants plus foam.
	Number of Tanks		Volume (m ³)				
	13	4.0 Dia. x 10.0H	125.7		1/4 \$ 3,976,283		
	3	2.2 Dia. x 2.7H	10.0	Carbon Steel			
	4	4.0 Dia. x 4.2H	50	Carbon Steel			
	1	2.5 Dia. x 4.2H	20	Carbon Steel			
12.	Organic Tank Truck Unloading Area o Building o Concrete Pit o Storage Tanks	23 x 26 x 8H • 8 x 34 x 8H	AREA 870		\$ 760.53 \$ 661,651 \$ 91,264	Process Ventilation (F) provided.	External hydrants plus foam deluge water spray.
	Number of Tanks	4 x 7 x 1 1/2 (Sloping Sides)	Volume (m ³) 25		\$ 178,848		
13.	Incinerator Waste Receiving Tanks o Storage Tanks				N/A \$ 153,200	Tanks to be provided with Process Ventilation (E).	External hydrants plus foam.
	Number of Tanks	3.6 Dia. x 4.0H	Volume (m ³) 40.5	Carbon Steel			
14.	Segregated Organic Storage Tank Area o Storage Tanks				N/A \$ 325,073		External monitor hydrants plus foam
	Number of Tanks	3.5 Dia. x 4.2H	Volume (m ³) 40.5				
15.	Storage Building	23 x 55 x 8H	AREA 1265	Walls and roof constructed of insulated panels.	\$ 552.00 \$ 698,280	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A). General Ventilation (F). Process Ventilation (E) (if required).	External hydrants plus foam injected sprinkler system. Building construction to include explosion venting panels.

TABLE C-8 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES
150 000 L/A CAPACITY

Page 6 of 9

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	\$/m ²	ESTIMATED COST	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
16.	Main Substation	20 x 25 x 4.25m	500		\$ 49.68	\$ 24,840		External Hydrants Firewalls separating Main Transformers from each other and Area 17 will be provided.
17.	Emergency Power Station	20 x 23 x 4.25m	460	3 walls - insulated 1 wall - brick Roof - buildup roof of asphalt and gravel	\$ 760.53	\$ 349,845	Steam Unit Heating and General Ventilation (F)	External Hydrants
18.	Surface Water Pumphouse	12 x 8 x 4m	96	Walls and roof constructed of insulated panels.	\$3,061.87	\$ 293,940	Steam or electric heating Ventilation (F)	External Hydrant
19.	Sanitary Sewage Plant	8 x 8 x 4m	16	Walls and roof constructed of insulated panels.	\$1,725.00	\$ 27,600	Steam or electric heating Ventilation (F)	External Hydrant
20.	Raw Water Treatment Plant	12 x 10 x 4m	120	Walls and roof constructed of insulated panels.	\$1,480.00	\$ 165,600	Steam or electric heating Ventilation (F)	External hydrant plus standpipe and hose.
21.	Firewater Pumphouse	12 x 8 x 4m	96	Walls and roof constructed of insulated panels.	\$3,061.87	\$ 293,940	Steam or electric heating Ventilation (F)	Sprinkler system to be provided for pumphouse and a valved fire pump test header to serve as a hydrant.
25.	Solidified Material Interim Storage Building	20 x 15 x 8m	300	Walls and roof constructed of panels.	\$ 552.00	\$ 165,600	Ventilation (F)	External Hydrant
28.	Incinerator Stack o Outer Shell o One (1) Liner (Allowance for Future Liner)	60H 4.5 ID, 5 OD (NOM.) 1.3 m ID (NOM.)	N/A	Concrete Carbon Steel		\$ 1,242,000	N/A	External Hydrants

TABLE C-4 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES
150 000 t/a CAPACITY

BLOCK NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	\$/m ²	ESTIMATED COST	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
29.	Auxiliary Boiler Stack	30H x 2.5 ID (NOM.)		Carbon Steel		\$ 241,500		External Hydrant
30.	Evaporator Stack	45H x 0.8 ID (NOM.)		Concrete stack with steel liner		\$ 459,540		External Hydrant
32.	Temporary Truck Holding Area (Organic) (Paved Area)		800		\$ 37.51	\$ 30,008		External Hydrant
33.	Truck Holding Area (Organic) (Paved Area)		800		\$ 37.51	\$ 30,008		External Hydrant
34.	Temporary Truck Holding Area (Inorganic) (Paved Area)		1400		\$ 37.51	\$ 52,514		External Hydrant
35.	Truck Holding Area (Inorganic) (Paved Area)		2000		\$ 37.51	\$ 75,020		External Hydrant
36.	Car Park (paved area)		5750		\$ 37.51	\$ 215,683		External Hydrants
42.	Truck Load Out Station	6 x 6 x 16H	36	Walls and roof constructed of panels.	\$ 2606.00	\$ 93,840	Ventilation (F)	External Hydrant
43.	Truck Wash Station o Building o Concrete Basement	15 x 25 x 6H N/A	375 N/A	Walls and roof constructed of insulated panels.	\$ 760.53	\$ 285,200 \$ 65,881	Heating provided by Forced Air (Heat Recovery from Incinerator) System (A). Process Ventilation (E) provided.	External hydrants plus deluge water spray system for each truck wash bay.
45.	Evaporator/Recycle Pumphouse	12 x 8 x 4H	96	Walls and roof constructed of insulated panels.	\$ 3061.87	\$ 293,940	Steam or electric heating Ventilation (F)	External Hydrant

9 Apr 87

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TABLE C-4 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES
150 000 L/A CAPACITY

BUILDING NO.	DESCRIPTION OF BUILDINGS AND STRUCTURES	SIZE (m)	AREA (m ²)	CONSTRUCTION	ESTIMATED COST \$/m ²	DESCRIPTION OF HVAC SYSTEM (SEE ATTACHED NOTES PAGE 9)	DESCRIPTION OF FIRE FIGHTING SYSTEM
46.	Fuel Oil Tanks Number of Tanks 2	5 Dia. x 15H	Volume (m ³) 295	Carbon Steel	\$ 242,880		External monitor hydrants plus foam
47.	Effluent Storage Tanks Number of Tanks 5	6 Dia. x 12.3H	Volume (m ³) 320	Carbon Steel	\$ 752,376		External Hydrant

TABLE C.4 OPERATING AREA INFORMATION FOR TAX ASSESSMENT PURPOSES

150 000 L/a CAPACITY

NOTES: 1. Definition of HVAC services are as follows:

- A = Outside air heated by energy recovery (where applicable) and Glycol/Water Coil indirectly served by steam from incinerator, plus steam unit heater for local control.
- B = Heat energy recovery by run-a-round system between process/general extract and forced air heating system (A).
- C = Full air-conditioning, heat indirect from incinerator and cooling from steam operated absorption chiller.
- D = Semi air-conditioning, (heating and cooling only) heating re-circulated plus outside, indirect from incinerator, cooling from central systems. Forced air delivery.
- E = Process Ventilation - i.e. extract from process areas and or equipment. Also refers to closed tank extract.
- F = Generally roof exhaust fans, washroom ventilation, etc.

APPENDIX C

1984 APPORTIONMENT FOR NIAGARA REGION

ASSESSMENT REGION NO. 18
Regional Municipality Niagara

Box 1270

43 Church Street,

St. Catharines, Ontario L2R 7A7

Tel. 410-088 (12)

July 25, 1984

Regional Municipality of Niagara
2201 St. Davids Road
P.O. Box 1052
THORNHILL, Ontario
L2V 4T7

Attention: Mr. S. Howler
Director of Finance

FINANCE DEPT	
To	Int. 1
Director	
Fin. Serv.	
Municipal	
EDP	
Supp. & Gen.	
Research	
Return to Central File	

Dear Mr. Howler:

Re: Final 1984 Apportionment for the
Regional Municipality of Niagara

Please find attached the Final 1984 Apportionment for the Regional Municipality of Niagara, as provided for in Sections 128 and 129 of the Regional Municipality of Niagara Act, 1980, and regulations under the Ontario Unconditional Grants Act.

Total Equalized Assessment includes, where applicable:

1. The total taxable assessment according to the 1983 Assessment Rolls as returned, discounted and equalized.
2. The valuations for payments in lieu of taxes, which include payment in respect of upper tier levies paid by the Crown in the Right of Canada or any Province or any Board, Commission, Corporation or other Agency thereof or the Ontario Hydro Electric Power Commission of Ontario to any area municipality as in accordance with Section 128 (11) of the Regional Municipality of Niagara Act, 1980, discounted and equalized.
3. The equivalent assessment of payments received in accordance with Section 4 of the Provincial Parks Municipal Tax Assistance Act, 1974 and Sections 160 and 161 of the Municipal Act, all as equalized.

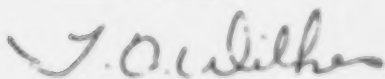


July 25, 1984

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Any appeal against this report shall be made within thirty (30) days from the date of issuance to The Ontario Municipal Board, 180 Dundas Street West, TORONTO, Ontario. MSC 128.

Yours very truly,



T. A. Wilkes
Regional Assessment Commissioner

TAW:es

Attach.

REGIONAL MUNICIPALITY OF NIAGARA

FINAL 1984 APPORTIONMENT

<u>Municipality</u>	<u>Total Local Weighted Assessment (Col. 13)</u>	<u>Apportionment Percentage % (Col. 14)</u>
NIAGARA FALLS, C.	\$1,331,793,530	22.502
PORT COLBORNE, C.	286,594,787	4.842
ST. CATHARINES, C.	1,806,004,990	30.515
WELLAND, C.	689,987,840	11.658
THOROLD, C.	304,211,500	5.140
FORT ERIE, T.	375,720,746	6.348
GRINSBY, T.	242,816,353	4.103
LINCOLN, T.	221,478,161	3.742
NIAGARA-ON- THE -LAKE, T.	289,781,844	4.896
PELHAM, T.	150,728,254	2.547
WAINFLEET, TP.	79,416,932	1.342
WEST LINCOLN, TP.	139,970,938	2.365
 TOTALS:	 \$5,918,505,875 *****	 100.000 *****

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGIONAL APPORTIONMENT IN NIAGARA R
GENERAL LEVY

UTDF: .4664 *

CODE	MUNICIPALITY	1984 RESID LOCAL & FARM ASSESSMENT TAXABLE	1984 RESID LOCAL DISCOUNTED & INDL ASSESSMENT GRANTS-IN- LEIU	1984 RESID ASSESSMENT TOTAL COL 1 + 2	LOCAL & INDL LOCAL & FARM ASSESSMENT COL 3 X UTDF	1984 COMM. LOCAL & INDL ASSESSMENT TAXABLE	1984 COMM. LOCAL & INDL ASSESSMENT GRANT-IN- LEIU	1984 COMM. LOCAL ASSESSMENT EQUIVALENT PORTION	1984 COMM. ASSESSMENT TOTAL COL 5+6+7
		1	2	3	4	5	6	7	8
18101	NIAGARA FALLS C	109,709,352	3,073,244	112,782,596	50,346,151	84,967,002	11,314,384	4,664,208	100,945,594
17192	PORT COLBORNE C	29,977,140	192,230	30,169,370	13,467,607	19,358,000	2,564,295	1,007,636	22,929,931
18103	ST. CATHARINES C	190,219,185	2,935,295	193,154,460	86,224,160	34,286,130	4,524,685	8,093,931	96,904,746
18104	WELLAND C	64,571,755	1,036,515	65,608,270	28,309,852	50,714,195	3,273,735	3,566,687	57,559,617
18105	THOROLD C	22,289,125	120,635	22,409,810	10,003,739	22,843,980	1,620,805	820,010	25,284,795
18401	FORT ERIE T	43,168,920	254,075	43,422,995	19,384,025	18,978,025	557,670	2,860,427	22,396,122
18402	GRIMSBY T	26,840,535	122,530	26,963,165	12,036,357	7,414,010	362,455	826,568	8,603,033
18403	LINCOLN T	21,930,315	104,250	22,034,565	9,836,230	5,838,460	414,900	654,159	6,907,519
18404	NIAGARA-ON-THE-LAKE	20,085,890	92,279	20,178,169	9,007,535	5,300,188	1,259,273	776,700	7,336,161
18405	PELHAM T	20,778,148	160	20,778,308	9,275,437	2,386,480	103,090	579,637	3,069,207
18601	WAINFLEET TP	11,180,646	0	11,180,646	4,991,040	1,212,059	43,763	328,860	1,584,632
18802	WEST LINCOLN TP	14,546,740	0	14,546,740	6,493,665	3,368,745	97,730	341,721	3,808,196
		<u>575,297,851</u>	<u>7,981,263</u>	<u>583,279,114</u>	<u>260,375,796</u>	<u>306,667,274</u>	<u>26,141,785</u>	<u>24,520,544</u>	<u>357,329,603</u>

*1984 UTDR (UPPER TIER DISCOUNT FACTOR) AS PUBLISHED IN ONT. REG. 648/82, GAZETTED OCT. 16/82.

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGIONAL APPORTIONMENT IN NIAGARA R

1984 GROSS LEVY: N/A

GENERAL LEVY

CODE	MUNICIPALITY	SECS6 INTRO YEAR	MKT VALUE INTRO YEAR	EQUALTN FACTOR 07/11/81 GAZETTE	EQUALTN FACTOR 07/10/82 GAZETTE	EQUALTN FACTOR 07/09/83 GAZETTE	AVERAGE 3 YEAR FACTOR	DISCOUNTED EQLD ASSEMT USING AVG FACTOR COL(4+8)/12*100	1984 PERCENTAGE APPORTMENT RESPBLTY	1984 DOLLAR APPORTMENT RESPBLTY (INFO ONLY)
				9	10	11	12	13	14	14A
18101	NIAGARA FALLS C			11.73	11.38	10.98	11.36	1,331,793,530	22.502	N/A
17192	PORT COLBORNE C			13.04	12.60	12.47	12.70	286,594,787	4.842	N/A
18103	ST. CATHARINES C			10.54	10.00	9.88	10.14	1,806,004,990	30.515	N/A
18104	WELLAND C			12.86	12.70	12.20	12.59	689,987,840	11.658	N/A
18105	THOROLD C			11.93	11.51	11.37	11.60	304,211,500	5.140	N/A
18401	FORT ERIE T			11.31	10.98	11.10	11.12	575,720,746	6.348	N/A
18402	GRIMSBY T			8.72	8.63	8.15	8.50	242,816,353	4.103	N/A
18403	LINCOLN T			7.80	7.48	7.40	7.56	221,478,161	3.742	N/A
18404	NIAGARA-ON-THE-LAKE	80		6.18	5.50	5.30	5.64	289,781,844	4.896	N/A
18405	PELHAM T			8.48	8.22	7.68	8.19	150,728,254	2.547	N/A
18801	WAINFLEET TP	81		8.82	7.78	8.24	8.28	79,416,932	1.342	N/A
18802	WEST LINCOLN TP			7.38	7.18	7.51	7.36	139,970,938	2.365	N/A
								5,918,505,875	100.000	N/A

*NOTE: 1984 LEVY WILL BE DISTRIBUTED ON THE BASIS OF THE PERCENTAGES CONTAINED IN COL. 14.

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGIONAL APPORTIONMENT IN NIAGARA R

GENERAL LEVY

1982 GROSS LEVY: 35,698,265^a
1983 GROSS LEVY: 37,957,928
1984 GROSS LEVY: N/A

CODE	MUNICIPALITY	1982 PERCENTAGE APPORTMENT RESPBLTY	1983 PERCENTAGE APPORTMENT RESPBLTY	1984 PERCENTAGE APPORTMENT RESPBLTY	LOWER OF 83-84 PERCENTAGE RESPBLTY	DOLLAR RESP (COL. 18 AND LOWER OF 82 OR 83 LEVY)	LOWER OF 82 AND 83 PERCENTAGE RESPBLTY	DOLLAR RESP (COL. 20 AND LOWER OF 82 OR 83 LEVY)	REDUCTION IN SHARING RESPBLTY COL. 19-COL. 21
		Σ	Σ	Σ	Σ	\$	Σ	\$	Σ
18101	NIAGARA FALLS C	22.383	21.892	22.502	21.892	7,815,064	21.892	7,815,064	
17192	FORT COLBORE C	4.853	4.975	4.842	4.842	1,728,510	4.853	1,732,437	- 3,927
18103	ST. CATHARINES C	30.785	30.691	30.515	30.515	10,893,326	30.691	10,956,155	-62,829
18104	WELLAND C	11.762	11.926	11.658	11.658	4,161,704	11.926	4,257,375	-95,671
18105	THURGOOD C	4.696	5.191	5.140	4.696	1,676,391	4.696	1,676,391	
18401	FORT ERIE T	6.430	6.472	6.348	6.348	2,266,126	6.430	2,302,538	-36,412
18402	GRIMSBY T	4.068	4.001	4.103	4.001	1,428,288	4.001	1,428,288	
18403	LINCOLN T	3.783	3.769	3.762	3.762	1,335,829	3.769	1,345,468	- 9,639
18404	NIAGARA-ON-THE-LAKE	4.800	4.790	4.896	4.790	1,709,947	4.790	1,709,947	
18405	PELHAM T	2.486	2.512	2.547	2.486	887,459	2.486	887,459	
18801	WAINFLEET TP	1.349	1.369	1.342	1.342	479,071	1.349	481,570	- 2,499
18802	WEST LINCOLN TP	2.385	2.412	2.365	2.365	846,264	2.385	851,404	- 7,140
		100.000	100.000	100.000	98.877	35,225,979	99.288	35,446,096	-218,177

*NOTE: IN THE CASE OF GENERAL PURPOSES; THE 1982 NET LEVY AFTER REGIONAL PER CAPITA GRANTS
FINAL 1984 APPORTIONMENT GUARANTEE GRANT ENTITLEMENTS WILL BE BASED ON THE LOWER OF 1982, 1983 OR 1984 LEVIES.
IF 1984 LEVY IS NOT AVAILABLE IT WILL BE ASSUMED TO BE HIGHER THAN THE 1982 OR 1983 LEVIES.

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGIONAL APPORTIONMENT IN NIAGARA R

CODE	MUNICIPALITY	NO OF REQN	1983 APPTMT GUARANTEE GRANT	1984 HOUSE- HOLDS	LIMIT \$10 PER HOUSE-- HOLD	UPPER LIMIT COL 24 - COL 26	DECREASES IN SHARE ALL LEVIES FROM PAGE 3 \$	CHANGE IN RESPBLTY PLUS UPPER LIMIT COL'S 27+28	1984 PROV APPTMT GUARANTEE GRANT LESSER OF COL 27,29
		23	24	25	26	27	28	29	30
18101	NIAGARA FALLS C	1	0	26,404	264,040	0	0	0	-
17192	PORT COLBORNE C	1	0	7,686	75,860	0	- 3,927	- 3,927	-
18103	ST. CATHARINES C	1	0	46,693	466,930	0	-62,829	-62,829	-
18104	WELLAND C	1	0	16,819	168,190	0	-95,671	-95,671	-
18105	THOROLD C	1	0	5,554	55,540	0	0	0	-
18401	FORT ERIE T	1	0	11,364	113,640	0	-36,412	-36,412	-
18402	GRIMSBY T	1	0	5,564	55,640	0	0	0	-
18403	LINCOLN T	1	0	4,879	48,790	0	- 9,639	- 9,639	-
18404	NIAGARA-ON-THE-LAKE	1	190,282	4,513	45,130	145,152	0	145,152	145,152
18405	PELHAM T	1	0	3,946	39,460	0	0	0	-
18801	WAINFLEET TP	1	6,873	2,672	26,720	0	- 2,499	- 2,499	-
18802	WEST LINCOLN TP	1	0	2,971	29,710	0	- 7,140	- 7,140	-
			<u>197,155</u>						<u>145,152</u>

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGIONAL APPORTIONMENT IN NIAGARA R

EQUIVALENT ASSESSMENT

CODE	MUNICIPALITY	1984 TOTAL INSTNL PAYMENTS	1983 AVG COMM MILL RT	EQUIVALENT INSTNL ASSESSMENT	1984 TOTAL TELEPHONE PAYMENTS	1983 AVG OVERALL MILL RT	EQUIVALENT TELEPHONE- TELEGRAPH ASSESSMENT	TOTAL EQUIVALENT PORTION COL 3 + 6
		1	2	3	4	5	6	7
18101	NIAGARA FALLS C	92,600	148.819	622,232	1,033,691	255.739	4,041,976	4,664,208
17192	PORT COLBORNE C	6,500	164.620	39,485	255,892	264.310	968,151	1,007,636
18103	ST. CATHARINES C	262,800	164.506	1,597,510	1,835,278	282.506	6,496,421	8,093,931
18104	WELLAND C	173,450	140.278	1,236,473	592,592	254.308	2,330,214	3,566,687
18105	THOROLD C	6,500	128.529	50,572	198,114	257.479	769,438	820,010
18401	FORT ERIE T	149,472	123.732	1,208,030	373,445	226.002	1,652,397	2,860,427
18402	GRIMSBY T	6,150	143.691	41,372	215,914	274.981	785,196	826,568
18403	LINCOLN T	759	139.492	5,441	184,646	284.632	648,718	654,159
18404	NIAGARA-ON-THE-LAKE	35,200	141.284	249,144	158,518	300.476	527,656	776,700
18405	PELHAM T	0	111.904	0	144,332	249.004	579,637	579,637
18801	WAINFLEET TP	0	98.598	0	69,540	211.458	328,860	328,860
18802	WEST LINCOLN TP	0	124.277	0	91,874	268.857	341,721	341,721
		733,431		5,050,259	5,153,836		19,470,285	24,520,544

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

18000 NIAGARA R

CALCULATION OF 1983 AVERAGE MUNICIPAL COMMERCIAL MILL RATES - FOR DATA REFERENCES SEE ANALYSIS OF TAXATION

CODE	MUNICIPALITY	COMM. AND BUSINESS TAXES LEVIED		COMM. AND BUSINESS ASSESSMENT		AVG MUNIC COMMERCIAL MILL RATE $(1)/(2)*1000$
		(1200 COL 7+8)	(2200 COL 7+8)	(101 COL 2+3)		
		(1)	(2)	(3)		
18101	NIAGARA FALLS C	12,749,141	86,668,586	148.819		
17192	PORT COLBORNE C	3,287,678	19,849,810	164.620		
18103	ST. CATHARINES C	13,750,614	33,587,150	164.506		
18104	WELLAND C	7,239,872	51,810,715	140.278		
18105	THOROLD C	2,931,227	22,805,995	128.529		
18401	FORT EMIE T	2,374,198	19,188,205	123.732		
18402	GRIMSBY T	1,100,757	7,404,985	148.651		
18403	LINCOLN T	817,391	5,859,750	139.492		
18404	NIAGARA-ON-THE-LAKE	735,042	5,202,599	141.284		
18405	FELHAM T	262,817	2,348,600	111.904		
18801	WAINFLEET TP	125,471	1,272,550	98.598		
18802	WEST LINCOLN TP	414,190	3,332,805	124.277		

MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

18000 NIAGARA R

CALCULATION OF 1983 AVERAGE OVERALL COMMERCIAL MILL RATES - FOR DATA REFERENCES SEE 1982 ANALYSIS OF TAXATION

CODE	MUNICIPALITY	PUBLIC COMM'L & BUSINESS TAXES LEVIED (301 COL 7+8)	PUBLIC COMM'L & BUSINESS ASSESSMENT (301 COL 2+3)	AVG PUBLIC COMMERCIAL MILL RATE (4)/(5)*1000	SECNDRY COMM'L & BUSINESS TAXES LEVIED (501 COL 7+8)	SECNDRY COMM'L & BUSINESS ASSESSMENT (501 COL 2+3)	AVG SECNDRY COMMERCIAL MILL RATE (7)/(8)*1000	AVG OVERALL COMMERCIAL MILL RATE (3)+(6)+(9)
		(4)	(5)	(6)	(7)	(8)	(9)	(10)
18101	NIAGARA FALLS C	3,864,349	68,094,271	56.750	4,297,993	85,668,586	50.170	255.739
17192	PORT COLBORNE C	982,009	18,630,430	52.710	932,544	19,849,810	46.980	264.310
18103	ST. CATHARINES C	4,972,836	78,078,750	63.690	4,539,618	83,587,150	54.310	282.506
18104	WELLAND C	2,896,052	48,035,370	60.290	2,773,560	51,610,715	53.740	254.308
18105	THOROLD C	1,475,961	21,644,835	68.190	1,385,692	22,805,995	60.760	257.479
18401	FORT ERIE T	916,024	16,925,805	54.120	923,912	19,188,205	48.150	226.002
18402	GRIMSBY T	479,162	7,027,900	68.180	430,600	7,404,985	58.150	274.981
18403	LINCOLN T	449,991	5,744,807	78.330	391,490	5,859,750	66.810	284.632
18404	NIAGARA-ON-THE-LAKE	407,440	4,740,042	85.957	381,013	5,202,599	73.235	300.476
18405	PELHAM T	145,074	2,001,860	72.470	151,790	2,348,600	64.630	249.004
18801	WAINFLEET TP	64,595	1,084,536	59.560	67,827	1,272,550	53.300	211.458
18802	WEST LINCOLN TP	254,639	3,265,440	77.980	221,965	3,332,805	66.600	268.857

MMAH - MUNICIPAL MANAGEMENT POLICY BRANCH

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MUNICIPAL ANALYSIS AND RETRIEVAL SYSTEM

1984 REGINAL APPORTIONMENTS - 1984 SECTION 160 PAYMENT (FORMERLY SECTION 304) - FOR NIAGARA R

CODE	MUNICIPALITY	TYPE I-INST P-PARK	DESCRIPTION	UNITS	1984	SEC 160 PAYMENT	MUNICIPAL SUBTOTAL
18101	NIAGARA FALLS C	I	THE GREATER NIAGARA GENERAL HOSPITAL	402		20,100	
		I	NIAGARA COLLEGE	130		6,500	
18102	PORT COLBORNE C	I	INTERNATIONAL BRIDGES	1		66,000	92,600
18103	ST CATHARINES C	I	PORT COLBORNE GENERAL HOSPITAL	130		6,500	6,500
		I	HOTEL DIEU HOSPITAL	284		14,200	
		I	SHAVER HOSPITAL	119		5,950	
		I	ST. CATHARINES GENERAL HOSPITAL	545		27,250	
		I	BROCK UNIVERSITY	3,945		197,250	
18104	WELLAND C	I	NIAGARA COLLEGE	363		18,150	262,800
		I	WELLAND COUNTY GENERAL HOSPITAL	417		20,850	
18105	THOROLD C	I	NIAGARA COLLEGE	3,052		152,600	173,450
18401	FORT ERIE T	I	NIAGARA R.D.C.	130		6,500	6,500
		I	DOUGLAS MEMORIAL HOSPITAL	93		4,650	
		I	INTERNATIONAL BRIDGES	1		144,822	149,472
18402	GRIMSBY	I	WEST LINCOLN MEMORIAL HOSPITAL	123		6,150	6,150
18403	LINCOLN	P	HORTICULTURAL RESEARCH INST. OF ONT. VINELAND STN.	93		759	759
18404	NIAGARA-ON-THE-	I	THE NIAGARA GENERAL HOSPITAL	44		2,200	
		I	INTERNATIONAL BRIDGES	1		33,000	35,200

APPENDIX D
BIBLIOGRAPHY

APPENDIX D: BIBLIOGRAPHY

1. Site Assessment, Phase 4B: Economic Impact, Morehouse Economic Planning Consultants, prepared for Ontario Waste Management Corporation, Toronto, Ontario, 1987.
2. Site Assessment, Phase 4B: Facility Characteristics, Monenco Limited, prepared for Ontario Waste Management Corporation, Toronto, Ontario, 1987.
3. 1984 Financial Statement and Financial Information Return for the following municipalities:
 - The Township of West Lincoln
 - The Regional Municipality of Niagara
 - The City of Thorold
 - The Town of Grimsby
 - The Town of Lincoln
 - The Town of Niagara-on-the-Lake
 - The Town of Pelham
 - The Township of Wainfleet
4. 1985 Current and Capital Budget for the following municipalities:
 - The Township of West Lincoln
 - The Regional Municipality of Niagara
5. 1984 Financial and Economic Survey
Regional Municipality of Niagara
6. 1986 Municipal Directory
Ministry of Municipal Affairs
7. 1984 Upper Tier Apportionment Schedules,
Ministry of Municipal Affairs
8. 1984 Equalization Factors by Property Class
Ministry of Revenue
9. 1984 Enrollment and Financial Statistics
Lincoln County Public School Board, and
Lincoln County Roman Catholic School Board

DISCUSSIONS AND INTERVIEWS HELD WITH THE FOLLOWING:

1. Mr. I. Nethercot
Head, Subsidy Administration and Operations Section
Municipal roads Office
Ministry of Transportation and Communications
2. Mr. C.E. Winter
Director, Field Operations Branch
Property Assessment Program
Ministry of Revenue
3. Mr. P. Smith
Manager, Quality Control Section
Property Assessment Program
Ministry of Revenue
4. Mr. Wm. Wu
Senior Manager, Assessment Policy and Legislation
Assessment Policies and Priorities Branch
Ministry of Revenue
5. Mr. R. Kennedy
Senior Planner, Office of Local Planning Policy
Research and Special Projects Branch
Ministry of Municipal Affairs
6. Mr. R. Skinner
Senior Policy Advisor
Finance Policy and Analysis
Municipal Finance Branch
Ministry of Municipal Affairs
7. Mr. K. Dudley
Economist
Finance Policy and Analysis
Municipal Finance Branch
Ministry of Municipal Affairs
8. Mr. D.B. Gittings
Staff Superintendent
Niagara Regional Police Force
9. Mr. F. Walsh
Regional Administrator
Regional Municipality of Niagara

10. Mr. A. Veale
Director of Planning
Regional Municipality of Niagara
11. Mr. M. Trojan
Treasurer
Regional Municipality of Niagara
12. Mr. M. Fraser
Director of Social Services
Regional Municipality of Niagara
13. Mr. C. Eidt
Director of Works
Regional Municipality of Niagara
14. Mr. J. Cousens
Superintendent of Operations
Emergency Measures Office
Regional Municipality of Niagara
15. Mr. J. Kirby
Co-ordinator, Emergency Measures Office
Regional Municipality of Niagara
16. Mr. A. Mackenzie
Superintendent of Business
Lincoln County School Board
17. Mr. S. Owen
Energy, Health and Safety Officer
Lincoln County School Board
18. Mr. S. Slevar
Assistant Business Administrator
Lincoln County Roman Catholic School Board
19. Mr. D. McCallum
Environmental Project Co-ordinator
Township of West Lincoln
20. Mr. R. Menus
Treasurer
Township of West Lincoln